

# Monthly Labor Review

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AUGUST 1960 VOL. 83 NO.

8

**The City Worker's Family Budget**

**Family Characteristics of Workers**

**Health Benefits for Pensioners**

**New Seasonal Adjustments for the Labor Force**

**UNITED STATES DEPARTMENT OF LABOR**

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# Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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## CONTENTS

### Special Articles

- 785 The Interim City Worker's Family Budget
- 809 Trends in Earnings of Factory Workers, 1947 to 1960
- 822 Special Labor Force Reports
- 822 New Seasonal Adjustment Factors for Labor Force Components
- 828 Family Characteristics of Workers, 1959

### Summaries of Studies and Reports

- 837 The Economic Climate of Collective Bargaining
- 841 Extension of Health Benefits to Prior Pensioners
- 843 The Changing Nature of the Union
- 846 Wages in Miscellaneous Plastics Products, January-February 1960

### Departments

- III The Labor Month in Review
- 853 Significant Decisions in Labor Cases
- 858 Chronology of Recent Labor Events
- 860 Developments in Industrial Relations
- 866 Book Reviews and Notes
- 875 Current Labor Statistics

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August 1960 • Vol. 83 • No. 8

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# The Labor Month in Review

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AFTER INVESTIGATING a complaint charging union election irregularities, Secretary of Labor James P. Mitchell on July 28 sued in the Federal District Court in Newark to void an election held in February by the Independent Petroleum Workers Union of Bayway, N.J., which represents workers at the Esso Bayway refinery. The suit, first of its kind under the Labor-Management Reporting and Disclosure Act of 1959, asked for a new election under the supervision of the U.S. Department of Labor, on the basis that the union had failed to provide adequate safeguards to insure a fair election.

The reporting and disclosure law was also a basis for a District of Columbia Court of Appeals ruling on July 21 in the Teamster-monitor board litigation. The court thwarted efforts to remove President James R. Hoffa from office by having him brought to trial on charges of misuse of union funds when it held that the consent decree establishing the monitor board did not authorize the removal of officers and that the 1959 labor law protects the right of union members to choose their own officers. A week earlier, monitor chairman Martin F. O'Donoghue, who was the prime force behind the attempt to remove Hoffa by court action, had resigned, effective upon appointment of a successor.

On August 2, Federal District Court Judge F. Dickinson Letts, who has retained jurisdiction of the original suit which resulted in the establishment of the monitor board, asked the parties in the case to begin meeting on September 6 to seek agreement on all matters pending in court in order to clear the way for a union election.

A dissident group in the Bakery and Confectionery Workers' International Union, who have accused President James G. Cross of misuse of union funds, asked a Federal district court to order a financial accounting and a special election

if a shortage be shown. The case could be settled out of court if the executive board accepts Cross' offer to resign provided he is granted a suitable pension.

THE SWITCHMEN'S UNION agreed on July 21 to a settlement with 17 western railroads patterned on those accepted earlier by the four other operating unions in the rail industry—a 4-percent increase in two steps over the period of the 16-month contract. The union failed in its attempt to negotiate an adjustment of wage differentials between road and yard employees after its demand on this point had been rejected by a Presidential Emergency Board.

Shortly before the railroads and the operating unions began formal negotiation of proposed work-rule changes at the national level, the Southern Railway formally withdrew all but one of its demands. However, the remaining issue—whether the job of fireman on freight trains should be abolished—is one of the most significant from the point of view of both unions and management and will not easily be resolved.

The Long Island Rail Road strike, which had lasted almost a month, ended August 3 when the Brotherhood of Railroad Trainmen and the carrier agreed to a 5-day workweek to be partially compensated by a 2½-cent-an-hour pay cut and changes in work rules. The carrier had also reportedly agreed to grant the shorter workweek to the Locomotive Engineers and the Locomotive Firemen and Enginemen, but details had not been agreed upon. The three unions had been working a 6-day week for 7 days' pay. The company said it would ask the New York Public Service Commission for a fare increase to cover the cost of this settlement as well as the increase received earlier in the national bargaining between the rail industry and the operating unions.

NEGOTIATIONS in the aircraft and missiles industry continued during July. The month-long International Association of Machinists strike against Lockheed's Missile and Space Division operations in California ended when the parties signed a contract for a 4-cent-an-hour increase retroactive to June 13 and 3 cents next year. The 2-year contract, covering 10,500 workers in California, New Mexico, and Hawaii, also provided for resumption of the escalator clause in July 1961 and for a layoff benefit plan paying \$50 per year

of service up to 10 years for employees laid off more than 4 weeks.

Members approved a contract and ended their strike at the North Haven, Conn., plant of United Aircraft's Pratt and Whitney Division on July 16. By August 9, the IAM and the UAW had signed agreements at all United plants in Connecticut except the Sikorsky Division operations at Bridgeport and Stratford, where the strike began when the UAW walked out on June 7. Meanwhile the National Labor Relations Board had received a petition for decertification from 1,700 nonstrikers at Bridgeport and Stratford.

Early in July, Hawaiian stevedoring companies and the International Longshoremen's and Warehousemen's Union concluded negotiations on a contract in which the industry agreed to pay \$450,000 into a fund for the period between June 15, 1959, and June 15, 1961, to ease the impact of automation. The fund will provide a guaranteed annual wage of \$4,693 for longshoremen and severance pay for a maximum of 100 longshoremen and clerks who quit the docks voluntarily. Allocation of the automation fund obtained by the ILWU from the Pacific Maritime Association was still being negotiated.

Negotiating under wage reopeners, Firestone, Goodyear, U.S. Rubber, and B. F. Goodrich agreed on wage increases averaging about 9½ to 10 cents an hour for 75,000 employees represented by the United Rubber Workers.

By mid-July, members of the Brotherhood of Railway and Steamship Clerks had ratified a 3-year contract with Pan American Airways which provided for a 38-cent-an-hour package increase. The union had been restrained from striking over wages by a Federal court order issued on July 1. Of the 4,700 clerical workers and freight handlers in the bargaining unit, 800 work at the Air Force Missile Test Center at Cape Canaveral, Fla.

**PERMISSION TO EMPLOY** Mexican nationals as replacements for domestic workers in two strikes was denied during the month. U.S. District Court Judge Luther C. Youngdahl, enforcing a Labor Department ruling, held that immigration officials may not permit Mexicans to commute across the border to a struck meatpacking plant in Texas. Secretary Mitchell refused, in effect, to permit a California firm to hire 300 Mexicans to harvest pears at its fruit ranches where there was a

strike and where a substantial number of domestic workers had refused employment. These facts, the Secretary said, precluded the certification required by law that sufficient domestic workers were not available and that the importation of Mexican workers would not adversely affect the wages and working conditions of agricultural workers similarly employed.

California growers, concerned about strikes by the Agricultural Workers Organizing Committee, which now reports about 4,000 members, have urged that farmwork be exempt from the employment service rule against referring workers to struck jobs. Mr. Mitchell called a hearing for August 22 at which interested parties were to present their views. On August 7, the Mexican government announced that it would not allow its nationals to work at locations picketed by United States agricultural workers.

**AN AMENDMENT** to the Universal Military Training and Service Act signed by President Dwight D. Eisenhower on July 12 makes the reemployment rights of National Guardsmen the same as those of reservists of the Armed Forces, liberalizes the reporting requirements for reservists and Guardsmen hospitalized during their tour of duty, and entitles those who cannot perform their regular work because they become disabled during their training to reemployment in jobs which they can do. The law becomes effective September 10, 1960.

The Amalgamated Clothing Workers stand against runaway shops was vindicated in an arbitration award which ordered Hickory Clothes, Inc., to reopen its New York plant and pay the ACWA \$200,000 in lost pay and contributions to the union's welfare and retirement fund for having violated its contract by moving its equipment and unfinished materials to a new plant in Mississippi. The union had asserted that the move left 300 workers without jobs.

In the wake of a nationwide strike of government workers, the Indian government early in August announced a raise in the minimum wage of its employees to 90 rupees (\$18.90) a month. The increase, retroactive to July 1, came about 3 weeks after union leaders had called off the 5-day strike during which 12 persons had died and some 9,000 had been arrested under emergency regulations outlawing the strike.



# The Interim City Worker's Family Budget

The Purpose and Methods Used in the Interim Revision

The Quantities of Goods and Services in the Budget

Its Cost in 20 Large Cities, Autumn 1959

HELEN H. LAMALE AND MARGARET S. STOTZ\*

## Origin of Budget and Purpose of Revision

The City Worker's Family Budget was originally developed by the Bureau of Labor Statistics in 1946-47 at the request of the Congress and with the assistance of a Technical Advisory Committee. It relates to a family of 4 persons, consisting of an employed husband, aged 38, with a wife not employed outside the home and 2 children, a girl aged 8 and a boy aged 13, who live in a rented dwelling in a large city or its suburbs. It was designed to estimate the dollar amount required to maintain such a family at a level of adequate living, according to prevailing standards of what is needed for health, efficiency, the nurture of children, and for participation in social and community activities—a level of living described as "modest but adequate." Estimates of its cost were published for 34 large cities as of March 1946, June 1947, October 1949, October 1950, and October 1951.<sup>1</sup> The Bureau discontinued pricing the original budget after October 1951 because the quantities and qualities of goods and services included in that budget were based on the pattern of living and standards prevailing in the period before World War II, as determined from expenditure studies made in 1934-36 and 1941.

Commenting on the standard of living prescribed for the budget, the Technical Advisory Committee stated in its report:

Such a budget is not an absolute and unchanging thing. The prevailing judgment of the necessary will vary with the changing values of the community, with the advance of scientific knowledge of human needs, with the productive power of the community and therefore [with] what people commonly enjoy and see others enjoy.<sup>2</sup>

There is ample evidence of a large increase in purchasing power and in the levels and standards of living of American families since prewar years.<sup>3</sup> Trend data on incomes of nonfarm families and consumer prices indicate that average family purchasing power has increased by 75 percent or more since the late 1930's. This increase alone has affected prevailing standards of living appreciably. Because of this and the many other changes in consumer markets and buying habits, the list of goods and services developed for the original budget no longer described a "modest but adequate" level of living in accord with prevailing standards and did not provide a valid basis for estimating the cost of the budget in current markets.

The purpose of the present revision was to develop a new list of goods and services which would more nearly reflect a "modest but adequate" level of living in terms of standards prevailing in the 1950's. The goods and services included in the revised budget, as in the original, were, insofar as possible, determined on the basis

\* Of the Division of Prices and Cost of Living, Bureau of Labor Statistics. Major contributions to the pricing of the budget were made by Ethel D. Hoover, Doris P. Rothwell, Vincent E. Covins, and Fay M. Bean.

<sup>1</sup> March 1946 and June 1947—The City Worker's Family Budget (in Monthly Labor Review, February 1948, pp. 133-170) and Workers' Budgets in the United States: City Families and Single Persons, 1946 and 1947 (BLS Bull. 927, 1948); October 1949 and October 1950—Family Budget of City Worker, October 1950 (in Monthly Labor Review, February 1951, pp. 152-158; reprinted as BLS Bull. 1021); and October 1951—City Worker's Family Budget for October 1951 (in Monthly Labor Review, May 1952, pp. 520-522).

<sup>2</sup> Monthly Labor Review, February 1948, op. cit., p. 137.

<sup>3</sup> Faith M. Williams, Standards and Levels of Living of City-Worker Families (in Monthly Labor Review, September 1956, pp. 1015-1023); How American Buying Habits Change (U.S. Department of Labor, 1959); U.S. Income and Output (U.S. Department of Commerce, Office of Business Economics, 1958); and Selma F. Goldsmith, Size Distribution of Personal Income, 1956-59 (in Survey of Current Business, April 1960, pp. 8-15).

of recognized scientific standards, with the selection among the various items meeting the standard based on actual choices of families. Where scientific standards did not exist, the quantities and kinds of goods and services were derived by statistical analyses of postwar consumption data, which define an adequate standard based on the collective judgment of the families.

The revision was undertaken on the assumption that there could be no change in the basic concept and general procedures or in the size, age, composition, and living arrangements of the family for which the budget was originally designed.<sup>4</sup> Because this revision was limited to changing the list of goods and services and did not include a reappraisal and revision of the previously used concept, definitions, and general procedures, it is considered an "interim revision." A more comprehensive revision of the budget is needed and has been proposed when data from the Bureau's 1961-62 consumer expenditure surveys become available.<sup>5</sup> Such a revision could not, however, be completed before 1964 at the earliest.

### The Budget Level and the Household

The "modest but adequate" level of living described by this budget standard is neither a "minimum maintenance" nor a "luxury" level. The budget does not show how an "average family" actually spends its money; neither does it show how a family should spend its money. Rather, it is an estimate of the total cost of a representative list of goods and services considered necessary by 4-person city families of the budget type to maintain a level of adequate living according to standards prevailing in large cities of the United States in recent years.

The autumn 1959 costs of the revised budget reflect both the very much higher standard of living which has prevailed in the 1950's, as compared with prewar years, and the increase in prices since the budget was last priced in 1951. The total cost of goods and services for 1959 is approximately 40 percent higher than the amounts for these same cities in 1951, with some variation from city to city. More than half of this change represents the increase in the standard of living which has occurred during the postwar period.

The budget's provisions for maintenance of health and efficiency and participation in social

and community activities mean that the level of living represented by this budget must be above a "minimum," in the usual narrow sense of that term. On the other hand, it is below the average level enjoyed by American families, as an examination of items and quantities represented in the budget will disclose. Comparisons of median or average incomes with the total budget costs also indicate that the budget represents a level of spending below the average for families of this type. Data on the current income of such families are not available, but the average income before taxes of budget-type families (that is, 4-person, 1-earner) in large cities and their suburbs in the BLS survey for 1950 was \$4,838. If allowance is made for the known underreporting in this survey and the trend in income of nonfarm families, published by the Department of Commerce,<sup>6</sup> and similar family income data are used to estimate the 1959 income before taxes of budget-type families, a conservative estimate of their average 1959 income is \$7,000, and a more likely average would be about \$7,500.

Although there has been a substantial increase in homeownership among city families at all income levels since prewar years, resources available for the interim revision of the budget did not permit the development of satisfactory concepts, procedures, and data for defining comparable dollar estimates of budget costs for homeowners. The budget assumes the family lives in a separate rented house or apartment, that there are no lodgers or cotenants, and that the husband has no dependents other than his wife and children. The dwelling which meets the standard for a family of this age and composition consists of five rooms (including kitchen) and a bathroom. (See detailed specifications on p. 806.) The wife does all the cooking, cleaning, and laundry without paid help, and the home is equipped with the housefurnishings and mechanical equipment usually considered to be household necessities, such as gas or electric cook stove, mechanical refrigerator, and washing machine. The budget assumes the family has an average inventory of such furnishings and equipment and purchases some items each year to maintain this inventory. Thus,

<sup>4</sup> For detailed description, see Monthly Labor Review, February 1948, and BLS Bull. 927, op. cit.

<sup>5</sup> See City Worker's Family Budget and the CPI (in Monthly Labor Review, September 1959, pp. 967-972).

<sup>6</sup> See U.S. Income and Output and Goldsmith, op. cit.

the quantities of these items specified for the budget are primarily replacement rates, plus such acquisition rates as are customary for established families at this age level.

### Cost of Budget in 20 Large Cities

The total annual cost of the revised list of goods, rents, and services at autumn 1959 prices in 20 large cities ranged from \$4,622 in Houston to \$5,607 in Chicago. The cost was \$5,199 in Washington, D.C., the base city for intercity comparisons. When personal taxes and other costs (social security deductions, life insurance, and occupational expenses) are added, the total budget cost ranged from \$5,370 in Houston to \$6,567 in Chicago and was \$6,147 in Washington, D.C. The allowance for life insurance and occupational expenses is \$138, the same in all cities. Since the total budget in all of these cities exceeded the maximum level of withholding for Federal old-age, survivors', and disability insurance, the allowance for social security deductions, \$120, is also the same. Allowances for Federal, State, and local income and personal taxes vary from city to city with the variations in both the level of the total budget and the provisions of the specific laws.

<sup>1</sup> The other cities classified by region are as follows: *Northeast*—Boston, New York, Philadelphia, Pittsburgh, Scranton; *North Central*—Chicago, Cincinnati, Cleveland, Detroit, Kansas City, Minneapolis, St. Louis; *South*—Atlanta, Baltimore, Houston; *West*—Los Angeles, Portland, San Francisco, Seattle.

Among the 20 cities, personal taxes ranged from \$490 to \$782, or about 9 to 12.5 percent of the total budget cost. The costs of the major components of the budget (food and beverages; rent, heat, and utilities; and other goods and services) for each of the 20 cities are shown in table 1.

Relative costs of the total budget, with the cost in Washington, D.C., equal to 100, ranged from 87 in Houston to 107 in Chicago and Seattle, or 20 percentage points (table 2). Excluding these three cities, the variation in cost of the total budget among the other cities was 11 percentage points. Costs for all three major components of the budget were higher in Chicago and Seattle and lower in Houston and Atlanta than in Washington, D.C. Relative differences in costs of the three components for the other cities were varied.

The cost of the budget for food and beverages was lowest in cities in the South and highest in cities in the Northeast, ranging from \$1,486 in Houston to \$1,889 in Pittsburgh. These differences in the cost of food reflect not only differences in prices, but more importantly, differences in regional preference patterns in the choice of foods to meet the budget standard. The annual cost of food and beverages in Washington, D.C., where the U.S. pattern was used in the calculation, was \$1,684.<sup>7</sup> Among the 20 cities, the cost of food and beverages varied by 24 percentage points. If Atlanta, Baltimore, and Houston,

TABLE 1. ANNUAL COSTS OF THE CITY WORKER'S FAMILY BUDGET,<sup>1</sup> 20 LARGE CITIES AND SUBURBS, AUTUMN 1959

City	Total budget	Goods, rents, and services				Other costs	Personal taxes
		Total	Food and beverages	Rent, heat, and utilities	Other goods and services		
Atlanta.....	\$5,642	\$4,840	\$1,514	\$1,151	\$2,175	\$258	\$544
Baltimore.....	5,715	4,850	1,325	1,004	2,321	258	610
Boston.....	5,317	5,334	1,857	1,240	2,237	258	725
Chicago.....	5,607	5,607	1,751	1,386	2,470	258	702
Cincinnati.....	5,100	5,163	1,734	1,203	2,226	258	679
Cleveland.....	5,199	5,305	1,695	1,191	2,419	258	656
Detroit.....	5,072	5,201	1,761	1,040	2,400	258	613
Houston.....	5,370	4,622	1,486	941	2,195	258	490
Kansas City.....	5,964	5,090	1,631	1,117	2,342	258	616
Los Angeles.....	5,285	5,325	1,747	1,178	2,400	294	666
Minneapolis.....	6,181	5,165	1,647	1,150	2,368	258	738
New York.....	5,970	5,048	1,853	1,013	2,182	273	649
Philadelphia.....	5,898	4,970	1,825	954	2,191	258	670
Pittsburgh.....	6,199	5,264	1,889	1,012	2,363	258	677
Portland, Oreg.....	6,222	5,182	1,746	1,046	2,390	258	782
St. Louis.....	5,266	5,271	1,694	1,296	2,279	258	737
San Francisco.....	5,304	5,341	1,795	1,079	2,467	294	699
Scranton.....	5,093	4,834	1,758	871	2,205	258	601
Seattle.....	5,562	5,602	1,844	1,293	2,465	258	702
Washington, D.C.....	6,147	5,199	1,684	1,226	2,289	258	690

<sup>1</sup> The family consists of an employed husband, aged 38, a wife not employed outside the home, an 8-year-old girl, and a 13-year-old boy.

NOTE: For items and quantities included in the various categories, see tables 5-8.

TABLE 2. RELATIVE INTERCITY DIFFERENCES IN THE COSTS OF THE CITY WORKER'S FAMILY BUDGET, 20 LARGE CITIES AND SUBURBS, AUTUMN 1959

[Washington, D.C. = 100]

City	Total budget	Goods, rents, and services			
		Total	Food and beverages	Rent, heat, and utilities	Other goods and services
Atlanta.....	92	93	90	94	95
Baltimore.....	93	93	91	82	101
Boston.....	103	103	110	101	98
Chicago.....	107	108	104	113	108
Cincinnati.....	99	99	103	98	97
Cleveland.....	101	102	101	97	106
Detroit.....	99	100	105	85	106
Houston.....	87	89	88	77	96
Kansas City.....	97	98	97	91	102
Los Angeles.....	102	102	104	96	105
Minneapolis.....	101	99	98	94	103
New York.....	97	97	110	83	95
Philadelphia.....	96	96	108	78	96
Pittsburgh.....	101	101	112	83	103
Portland, Oreg.....	101	100	104	83	104
St. Louis.....	102	101	101	106	100
San Francisco.....	103	103	107	88	108
Scranton.....	93	93	104	71	96
Seattle.....	107	108	110	105	108
Washington, D.C.....	100	100	100	100	100

NOTE: Based on table 1. For content of the various budget categories, see tables 5-8.

where the southern food consumption pattern was used in the budget, are excluded, the variation in cost of food and beverages among the remaining cities was 15 percentage points.

As in earlier studies, variations in rental housing costs were the most important factor contributing to cost differences between cities. Among these 20 cities, shelter costs represented about one-fifth to one-fourth of the total cost of goods and services. The annual cost of rent, heat, and utilities for the 5-room dwelling specified in the budget ranged from \$871 in Scranton to \$1,386 in Chicago. This difference is more than one-half the difference in the total cost of goods and services among these 20 cities.

With the cost in Washington, D.C., equal to 100, these shelter costs were 71 in Scranton and 113 in Chicago, a difference of 42 percentage points. Excluding these two cities, the overall percentage difference in the cost of rent, heat, and utilities was 29 percentage points, about the same magnitude as that observed when this type of comparison was last made in October 1951. However, the relative positions of the individual cities have changed substantially. These changes reflect the wide variations that have occurred among these cities in the level and movement of rents and in the characteristics of the rental housing markets since 1951. The differential effects of rent controls and variations in the dates

when they were lifted are important considerations in appraising the shifts in intercity differences in rental costs. For example, rent controls were lifted in 1949 in Houston but are still in effect for a sizable proportion of dwellings in New York City.

The cost of all other goods and services (excluding shelter and food) ranged from \$2,175 in Atlanta to \$2,470 in Chicago. Costs in Washington, D.C., were \$2,289. This component of the budget includes the cost of clothing, housefurnishings, transportation, medical care, personal care, household operation, reading, recreation, tobacco, education, gifts and contributions, and miscellaneous expenses. Together, these items generally represent about 45 percent of the total cost of goods and services, with clothing costs accounting for about 11 percent; transportation, about 10 percent; and costs of medical care, 6 or 7 percent in most cities. Differences in the cost of transportation and medical care accounted for most of the intercity differences in costs of these goods and services other than food and shelter. (See table 3.) Medical care costs were highest in Los Angeles, San Francisco, Minneapolis, and Seattle and lowest in Scranton, Cincinnati, and Atlanta. The overall difference in cost of the medical care budget was \$174. Transportation costs were lowest in Philadelphia, New York, and Boston, where greater use of public transportation was indicated by the 1950 data.

### Costs for Families of Other Sizes

For many purposes, estimates of the cost of budgets for families of other sizes are needed. The Bureau is making an interim revision of the Elderly Couple's Budget, with estimates of its cost at autumn 1959 prices in these same 20 cities. No budgets for other types of families are presently planned. However, an analysis of the 1950 consumer expenditure survey data has provided some more detailed "scales" with which to estimate the relative cost of the budget goods and services for families of other sizes than were previously available. For families of less than 4 persons, in the middle age ranges, these scales are very similar to those published with the original City Worker's Family Budget;<sup>8</sup> for larger families they are somewhat higher. They indicate that the total cost of

<sup>8</sup> BLS Bull. 927, op. cit., pp. 40-51, and Monthly Labor Review, May 1952, op. cit., p. 157.



TABLE 3. ANNUAL COSTS OF THE CITY WORKER'S FAMILY BUDGET,<sup>1</sup> 20 LARGE CITIES, AUTUMN 1959

Item	Atlanta	Balti- more	Boston	Chicago	Cincin- nati	Cleve- land	Detroit	Houston	Kansas City	Los Angeles
Food and beverages <sup>2</sup> .....	\$1,514	\$1,525	\$1,857	\$1,751	\$1,734	\$1,695	\$1,761	\$1,486	\$1,631	\$1,747
Food at home.....	1,261	1,294	1,601	1,498	1,463	1,431	1,506	1,236	1,413	1,457
Food away from home.....	176	174	191	197	212	205	193	173	168	191
Housing.....	1,402	1,259	1,478	1,632	1,448	1,440	1,300	1,192	1,370	1,445
Rent, heat, and utilities <sup>3</sup> .....	1,151	1,004	1,240	1,386	1,203	1,191	1,040	941	1,117	1,178
Housefurnishings.....	200	203	189	195	195	199	209	201	203	213
Household operation.....	51	52	49	51	50	50	51	50	50	54
Clothing.....	532	571	549	584	540	598	570	506	560	545
Husband.....	136	133	139	143	135	144	141	131	136	133
Wife.....	158	166	151	168	155	167	161	145	160	156
Boy.....	93	107	96	100	93	105	96	86	99	94
Girl.....	102	118	111	116	103	125	115	95	109	105
Clothing materials and services.....	45	47	52	57	54	57	57	49	56	57
Medical care.....	269	278	322	314	265	349	353	309	299	424
Transportation <sup>4</sup> .....	459	524	417	508	484	511	486	467	525	501
Automobile owners.....	563	638	714	696	584	628	586	569	637	620
Nonowners of automobiles.....	129	163	143	164	168	141	167	144	171	124
Other goods and services.....	664	693	711	758	692	712	731	662	705	663
Reading and recreation.....	207	213	226	239	219	235	232	199	215	214
Personal care.....	130	125	125	148	131	133	138	122	137	138
Tobacco.....	89	93	91	85	86	85	86	98	84	81
Public school expense.....	10	10	10	20	20	15	35	20	35	10
Communications.....	78	102	94	92	76	80	79	80	77	55
Gifts and contributions.....	113	113	124	130	120	123	121	107	118	124
Miscellaneous.....	37	37	41	44	40	41	40	36	39	41
Total cost of goods and services.....	4,840	4,850	5,334	5,607	5,163	5,305	5,201	4,622	5,090	5,325
Other costs <sup>5</sup> .....	258	258	258	258	258	258	258	258	258	294
Personal taxes.....	544	610	725	702	679	636	613	490	615	666
Estimated total cost of budget.....	5,642	5,718	6,317	6,567	6,100	6,199	6,072	5,370	5,964	6,285
	Minne- apolis	New York	Phila- delphia	Pitts- burgh	Portland, Oreg.	St. Louis	San Francisco	Scranton	Seattle	Washing- ton, D.C.
Food and beverages <sup>2</sup> .....	\$1,647	\$1,853	\$1,825	\$1,889	\$1,746	\$1,694	\$1,795	\$1,758	\$1,844	\$1,684
Food at home.....	1,400	1,594	1,583	1,603	1,472	1,465	1,533	1,513	1,548	1,447
Food away from home.....	187	198	179	231	208	170	193	185	227	181
Housing.....	1,393	1,260	1,203	1,275	1,306	1,543	1,348	1,127	1,568	1,470
Rent, heat, and utilities <sup>3</sup> .....	1,150	1,013	954	1,012	1,046	1,298	1,079	871	1,293	1,226
Housefurnishings.....	193	197	197	209	209	193	213	208	220	195
Household operation.....	50	50	52	54	51	52	56	48	55	49
Clothing.....	580	551	546	567	565	542	570	558	567	554
Husband.....	139	137	131	135	139	129	137	140	144	137
Wife.....	163	154	152	162	160	156	164	152	160	160
Boy.....	98	94	92	95	100	92	97	100	97	97
Girl.....	120	112	113	119	106	107	110	122	107	100
Clothing materials and services.....	60	54	58	56	60	58	62	44	59	51
Medical care.....	382	282	316	321	321	297	397	250	365	304
Transportation <sup>4</sup> .....	484	404	384	623	553	531	537	478	517	517
Automobile owners.....	591	715	650	634	675	646	672	588	636	634
Nonowners of automobiles.....	145	117	139	174	165	168	110	132	142	148
Other goods and services.....	679	698	696	689	691	664	694	663	741	670
Reading and recreation.....	207	225	221	216	212	194	225	227	219	212
Personal care.....	130	118	133	135	136	131	150	122	144	127
Tobacco.....	87	92	88	88	68	85	85	87	94	75
Public school expense.....	29	15	20	10	35	10	10	10	20	10
Communications.....	75	92	80	77	80	80	89	68	90	85
Gifts and contributions.....	120	117	116	122	120	123	124	112	130	121
Miscellaneous.....	40	39	38	41	40	41	41	37	44	40
Total cost of goods and services.....	5,165	5,048	4,970	5,264	5,182	5,271	5,341	4,834	5,602	5,199
Other costs <sup>5</sup> .....	258	273	259	258	258	258	294	258	258	258
Personal taxes.....	758	649	670	677	782	737	699	601	702	690
Estimated total cost of budget.....	6,181	5,970	5,898	6,199	6,222	6,266	6,304	5,693	6,562	6,147

<sup>1</sup> See footnote 1, table 1.<sup>2</sup> Includes alcoholic beverages.<sup>3</sup> Average contract rent for tenant-occupied dwellings that conform to the housing standards specified for the budget plus the cost of required amounts of heating fuel, gas, electricity, water, and specified equipment.<sup>4</sup> Weighted average costs of automobile owners and nonowners. (See footnote 19, table 7.)<sup>5</sup> Includes allowances for life insurance, occupational expenses, Federal old-age and survivors' insurance, and employee contributions to disability insurance as required by State law in California and New York.

NOTE: For items and quantities included in the various categories, see tables 5-8.

TABLE 4. ESTIMATED ANNUAL COST OF GOODS AND SERVICES PROVIDING THE SAME LEVEL OF WELL-BEING AMONG FAMILIES OF DIFFERENT SIZES,<sup>1</sup> 20 LARGE CITIES AND SUBURBS, AUTUMN 1959

City	Estimated 2-person	Estimated 3-person	CWFB cost for 4-person	Estimated 5-person
Atlanta.....	\$3,194	\$4,211	\$4,840	\$5,808
Baltimore.....	3,201	4,220	4,850	5,820
Boston.....	3,520	4,641	5,334	6,401
Chicago.....	3,701	4,878	5,607	6,728
Cincinnati.....	3,408	4,492	5,163	6,196
Cleveland.....	3,501	4,615	5,305	6,366
Detroit.....	3,433	4,525	5,201	6,241
Houston.....	3,051	4,021	4,622	5,546
Kansas City.....	3,359	4,428	5,090	6,106
Los Angeles.....	3,514	4,633	5,325	6,390
Minneapolis.....	3,409	4,494	5,165	6,198
New York.....	3,332	4,392	5,048	6,058
Philadelphia.....	3,280	4,324	4,970	5,964
Pittsburgh.....	3,474	4,580	5,264	6,317
Portland, Oreg.....	3,420	4,508	5,182	6,218
St. Louis.....	3,479	4,586	5,271	6,325
San Francisco.....	3,525	4,647	5,341	6,409
Seranton.....	3,190	4,206	4,834	5,801
Seattle.....	3,697	4,874	5,602	6,722
Washington, D.C.....	3,431	4,523	5,199	6,239

<sup>1</sup> The costs for 4-person families are those shown in table 1. For other families, estimates are based on the equivalent income scales shown in text below.

The head of all these families is age 35-55, and the family composition is as follows:

2-person: Husband and wife.

3-person: Husband and wife, 1 child between 6-16 years.

4-person: Husband and wife, 2 children, oldest between 6-16 years.

5-person: Husband and wife, 3 children, oldest between 6-16 years.

goods, rents, and services for a 2-person, husband-wife family, aged 35 to 55 years, would be about 66 percent of that for the 4-person budget-type family; for a 3-person family in this age range, with a child between 6 and 16 years, about 87 percent; and for a 5-person family, with the oldest child between 6 and 16 years, about 120 percent. It should be noted that these costs are for 1-earner families.

Estimates of the cost of total goods and services for 2-, 3-, and 5-person families, based on these scales, are shown in table 4. The application of these scales provides an estimate of the total cost of goods and services (spendable income) required by such families to maintain a level of living comparable with that described for the City Worker's Family Budget. In addition, the families will have a number of additional requirements for which costs vary according to locality, nature of employment or occupation, size of income, and number of dependents. These requirements, which include such items as Federal and State income taxes, social security deductions, union dues, and life insurance, must be estimated as appropriate for the individual family size and budget level in accordance with local conditions and provisions of specific laws.

## Sources and Methods of Revising Quantities

The revised quantities and kinds of goods and services which comprise the postwar "modest but adequate" standard for food and shelter were derived, as previously, to conform with scientific standards but within these standards to reflect actual choices of families as exhibited in postwar consumption data. For other goods and services where scientific standards do not exist, the revised budget represents an adequate standard based on the collective judgment of large-city families of this type, as revealed by analyses of postwar consumer expenditure data, primarily the BLS Survey of Consumer Expenditures in 1950. The revised list of goods and services and the quantities per year provided in the budget appear in tables 5-8. Explanatory notes on the table describe variations in the basic budget quantities as required for use in individual cities.

*Food.* The food at home component is based on the low- and moderate-cost food plans developed by the U.S. Department of Agriculture from its 1955 Household Food Consumption Study, in accord with nutritional standards recommended by the National Research Council (NRC). These plans were subsequently revised, with respect to the quantities for children, to comply with the 1958 NRC Recommended Dietary Allowances.<sup>9</sup>

In these plans, food items are grouped into 11 categories which contain foods similar in nutritive value and use in the diet, and the quantities provided meet the NRC's recommended allowances when average selections of food within each food group are used. Food consumption patterns, representative of the choices of nonfarm families in the lower and middle thirds of the income distribution in 1955, provided the guide in specifying the quantities for the low-cost and moderate-cost plans, respectively. Regional preference patterns in the selection of specific foods to meet the nutritional standards are also provided by the Agriculture study and were used in the budget for all cities except Washington, D.C., where the U.S.

<sup>9</sup> The Department of Agriculture first published these plans in the October 1957 issue of Family Economics Review. The revised quantities appear in Agriculture publication HHE (Adm.)-146 (July 27, 1959) and the costs at October 1959 prices for all U.S. cities combined in HHE (Adm.)-167 (Dec. 1, 1959).

TABLE 5. FOOD AND ALCOHOLIC BEVERAGE BUDGET QUANTITIES

Food at Home <sup>1</sup> (84 meals per week, 4,156 meals per year)				
[Quantities of food as purchased, assuming average choices within groups]				
Group and unit	Low-cost plan		Moderate-cost plan	
	Quantity			
	Per week	Per year	Per week	Per year
Milk and milk products <sup>2</sup> .....quart.....	19. 50	964. 9	20. 00	989. 6
Meat, poultry, fish.....pound.....	10. 50	519. 5	17. 25	853. 5
Eggs.....dozen.....	1. 92	95. 0	2. 24	110. 8
Dry beans, peas, nuts.....pound.....	1. 26	62. 3	. 74	36. 6
Grain products <sup>3</sup> .....do.....	12. 75	630. 9	11. 50	569. 0
Citrus fruit, tomatoes.....do.....	8. 75	433. 0	10. 25	507. 2
Potatoes.....do.....	9. 75	482. 4	8. 50	420. 6
Other vegetables and fruits.....do.....	21. 75	1076. 2	24. 50	1212. 3
Fats and oils.....do.....	2. 12	104. 9	2. 88	142. 5
Sugars and sweets.....do.....	2. 74	135. 6	3. 63	179. 6
Accessories:				
Coffee.....do.....	. 72	35. 6	. 87	43. 0
Tea.....bag.....	7. 78	385. 0	9. 06	448. 3
Soft drinks.....36 ounces.....	1. 03	51. 0	1. 27	62. 8
Other <sup>4</sup> .....	\$0. 20	\$9. 90	\$0. 18	\$8. 91

## Food Away From Home (212 meals per year)

Item and unit	Pricing code <sup>5</sup>	Quantity per year
Meals:		
Lunches at work.....meal.....	X-701.....	94
Lunches at school.....meal.....	X-702.....	98
Other meals.....meal.....	X-703.....	20
Snacks <sup>6</sup> .....		\$29.35

## Alcoholic Beverages

Item and unit	Pricing code <sup>5</sup>	Quantity per year
At home:		
Beer.....12 ounces.....	0-300 Reg.; 0-302 Reg.....	173.0
Liquor (whiskey, etc.).....1/4 gallon.....	0-400 Reg.; 0-401 Reg.....	2.0
Wine.....		( <sup>7</sup> )
Away from home.....		( <sup>7</sup> )

<sup>1</sup> Adapted from the low- and moderate-cost food plans published by the U.S. Department of Agriculture. (See text footnote 9.)

<sup>2</sup> Includes fluid whole milk and milk products, for which quantities are converted to units containing the same calcium content as milk, by using the following equivalents: 1 cup milk equals 1/4 pound cottage cheese (cream), 1 pound cream cheese, 1 1/4 ounces cheddar cheese, or 1 scant pint ice cream.

<sup>3</sup> Weight in terms of flour and cereal. 1 1/4 pounds of bread and baked goods are counted as 1 pound flour.

<sup>4</sup> Estimated cost in 1959 for all cities.

<sup>5</sup> The code numbers identify the articles and services priced for the budget. A detailed description of the items is available upon request.

<sup>6</sup> Cost is 5.8 percent of total cost of itemized alcoholic beverages.

<sup>7</sup> Cost is 35.7 percent of total cost of itemized alcoholic beverages.

## EXPLANATORY NOTES:

The annual allowance for food at home used in the calculation of the City Worker's Family Budget is an average of the estimated cost of the low- and moderate-cost food plans after adjustment for meals eaten away from home. The selection of specific foods which meet the nutritional standard and reflect regional preference patterns also affect the food budget cost. In estimating the unit cost of each of the major food groups for individual cities, regional preference patterns were taken into account for all cities except Washington, D.C., where the U.S. pattern was used. (See text footnote 7.) Specifications for pricing individual food items are available upon request.

The estimated costs of the low- and moderate-cost food plans, providing

21 meals a week for each member of a 4-person family, are shown for each of the 20 cities in the following tabulation:

City and suburbs	Low-cost plan		Moderate-cost plan	
	Weekly cost	Annual cost	Weekly cost	Annual cost
Atlanta.....	\$21.00	\$1,123	\$29.35	\$1,526
Baltimore.....	21.91	1,139	30.38	1,580
Boston.....	28.18	1,465	36.52	1,899
Chicago.....	26.97	1,402	33.56	1,745
Cincinnati.....	26.25	1,365	32.88	1,710
Cleveland.....	25.76	1,340	32.09	1,669
Detroit.....	27.09	1,409	33.80	1,758
Houston.....	21.44	1,115	29.33	1,525
Kansas City.....	25.41	1,321	31.69	1,648
Los Angeles.....	26.34	1,370	33.77	1,756
Minneapolis.....	25.06	1,303	31.53	1,640
New York.....	28.19	1,466	36.26	1,886
Philadelphia.....	27.59	1,450	36.08	1,876
Pittsburgh.....	28.30	1,472	36.51	1,898
Portland, Oreg.....	26.11	1,358	33.39	1,736
St. Louis.....	26.32	1,369	32.88	1,710
San Francisco.....	27.19	1,414	34.79	1,809
Scranton.....	26.69	1,388	34.45	1,791
Seattle.....	27.41	1,425	35.18	1,829
Washington, D.C.....	24.70	1,284	33.78	1,757

pattern was used.<sup>10</sup> This use of the regional preference patterns represents a deviation from the procedure followed in the original budget. At that time, appropriate regional patterns were not available for the food component, and the U.S. pattern was used in all cities. Regional or climatic adjustments were used previously in other parts of the budget, e.g., fuel, clothing, and transportation, and their use this time in the food component is believed to be consistent with the original budget concept.

The food plans as published by the Department of Agriculture provide for 21 meals per person per week to be eaten at home or carried from home. In the budget, the food at home component was adjusted to provide 4,156 meals a year at home and 212 meals away from home. The costs of both the low- and moderate-cost plans were calculated and their average cost was used in the budget. The total food and beverage cost also includes allowances for alcoholic beverages and snacks. (See table 5.)

The quantities of the 11 types of foods provided in the revised budget, when compared with the original, reflect both the improvements in standards of food consumption and the important changes in eating habits that have occurred since prewar years. Most evident are the increased quantities for the meat, poultry, and fish group—9.3 pounds per week in the original budget as compared with 10.5 pounds in the low-cost plan and 17.2 pounds in the moderate-cost plan used for the revised budget. Similarly, the revised budget provides greater quantities of milk and milk products, eggs, and citrus fruits and tomatoes. On the other hand, quantities of grain products, fats and oils, and sugar and sweets are lower in the revised than in the original budget.

The revised food budget also reflects the increase in the number of meals bought and eaten away from home by families of this type. The revised budget provides for 212 meals away from home as compared with 189 in the original budget. As before, most of these meals are lunches at work or school.

*Rent, Heat, and Utilities.* The shelter budget is based on rents for 5-room dwellings which meet standards established by the American Public Health Association and the U.S. Public Housing Administration. (See p. 806.) In addition to

the characteristics specified for the dwelling, the standard provides the necessary fuel for maintaining a temperature of 70° F. during the winter, as well as the gas, electricity, and water needed to operate the mechanical equipment provided and meet the personal needs of a family of this size and composition. (See table 6.)

The quantities of heating fuel were derived from an analysis of the purchases of fuel as reported in the Bureau's 1950 Survey of Consumer Expenditures by families occupying dwellings of the type specified for the budget, in relation to 1950 annual degree days in these cities as published by the U.S. Weather Bureau. In this analysis, the quantities of fuels required were expressed in standard British thermal units.

Quantities of utilities are based on estimates, obtained from utility companies and associations, of amounts required for households of "typical" size for appliances specified for the budget, modified to correspond to the 4-person budget family.

Revised budget quantities for gas, electricity, and water are all higher than those in the original budget. For example, the revised quantity for electricity for lighting and small appliances is 1,500 kilowatt hours per year as compared with 1,200 in the original budget. However, since rents in apartment structures usually include fuel and utilities, budget allowances for these items apply only to the proportion of tenants who pay separately for them. There is wide variation from city to city in practices of including these facilities in the contract rent, so appropriate amounts are calculated for each city and are added to the contract rent.

*Other Goods and Services.* The budget component called "other goods and services" includes the cost of clothing, housefurnishings, transportation, medical care, personal care, household operation, reading, recreation, tobacco, education, gifts and contributions, and miscellaneous expenses (table 7). Together, these items represent about 45 percent of the total cost of goods and services in this budget. For these goods and services, psychological and social requirements are more important than physical needs, and there are no

<sup>10</sup> The U.S. weights were used for Washington because its population comes from all parts of the United States and cannot be considered typically southern. Also, Washington serves as the base city in the computation of intercity indexes based on the budget.



TABLE 6. HOUSING BUDGET QUANTITIES

1. Rent, Heat, and Utilities <sup>1</sup>		
Group, item, and unit	Pricing code <sup>2</sup>	Quantity per year
Contract rent:		
Unfurnished 5-room dwelling containing specified installed equipment..... month	X-801.....	12
Heating fuel:		
Most common type heating fuel used in a given city.....		( <sup>3</sup> )
Water..... cubic foot		14, 000
Electricity:		
Lighting, refrigeration, and electrical appliances..... kilowatt-hour		1, 500
Power for heating equipment..... do		( <sup>4</sup> )
Gas: <sup>5</sup>		
Cooking..... therm		120
Hot water heating..... do		288
Refuse disposal:		
Trash and garbage removal.....		( <sup>6</sup> )
Equipment:		
Refrigerator.....	H-730.2 Reg.....	. 07
Range.....	H-742.1 Alt.; H-747 Alt.....	. 06
2. Housefurnishings		
Group and item	Pricing code <sup>2</sup>	Quantity per year
Household textiles:		
Bedding:		
Sheets.....	H-410 Reg.; H-411 Alt.....	2. 35
Pillow cases.....	FB-37.....	1. 93
Blankets, wool.....	H-430.1 Reg. (C); H-431.1 Reg. (C).....	. 29
Bedspreads.....	H-420 Reg. (B); H-421.1 Alt.....	. 35
Towels and other linens:		
Turkish towels.....	X-101.....	2. 48
Other towels.....		( <sup>7</sup> )
Table coverings.....	H-442 Aux.; H-443 Alt.....	. 46
Window coverings:		
Curtains.....	H-470 Reg. (C width, A length).....	1. 31
Draperies.....	FB-42.....	. 90
Other textiles.....		( <sup>8</sup> )
Floor coverings.....		* \$17. 69
Furniture:		
Living room:		
Living room suite.....	H-601.2 Alt. (A); H-602.2 Reg. (A); H-603.1 Alt. (A); H-604.1 Reg. (A, B); H-605 Reg. (A).....	. 06
Chair, fully upholstered.....	X-102.....	. 07
Chair, other.....	X-103.....	. 11
Table.....	H-618 Aux. (A, B, C).....	. 16
Sofa bed.....	FB-55 (A, B).....	. 03
Desk, bookcase, etc.....		* \$1. 20
Bedroom:		
Bedroom suite.....	H-652.2 Reg. (A, B).....	. 05
Bed.....	FB-61.....	. 05
Bedsprings.....	X-104.....	. 06
Mattress.....	H-636 Alt. (A).....	. 14
Chest.....	FB-62.....	. 04
Dinette set.....	H-661 Alt. (A, B); H-662 Reg. (A, B); H-671.1 Reg. (A, B); H-672.1 Alt. (A, B).....	. 07
Other furniture.....		( <sup>10</sup> )
Electrical equipment and appliances:		
Washing machine.....	FB-76.....	. 12
Vacuum cleaner.....	H-712 Reg.....	. 07
Iron.....	H-729 Aux.....	. 12
Ironing machine.....	X-105.....	. 01
Toaster.....	H-750 Reg.....	. 08
Food mixer, hand.....	FB-81.....	. 17
Sewing machine.....	H-701 Reg.....	. 05
Other equipment and appliances.....		( <sup>11</sup> )

See footnotes at end of table.

TABLE 6. HOUSING BUDGET QUANTITIES—Continued

2. Housefurnishings—Continued		
Group and item	Pricing code <sup>2</sup>	Quantity per year
Housewares, tableware:		
Carpet sweeper.....	X-106.....	0.03
Pots and pans.....		* \$4.79
Dishes, set.....	H-770 Reg.....	.14
Other china and crockery.....		(12)
Light bulbs.....	H-766 Reg.....	10.72
Clock.....	H-797 Aux. (A, B).....	.19
Miscellaneous household equipment.....		(13)
Other:		
Tools and mending materials.....		(14)
Insurance on furnishings and equipment.....		(15)
Servicing and repairs.....		(16)
3. Household Operation		
Group, item, and unit	Pricing code <sup>2</sup>	Quantity per year
Laundry and cleaning supplies:		
Laundry soap:		
Bar.....9½ ounces.....	FB-96.....	14.10
Flakes or chips.....12½ ounces.....	FB-97.....	9.75
Powder or granules.....20 ounces.....	H-801.0 Reg.; H-804.1 Reg.....	39.76
Starch.....pound.....	FB-98.....	8.27
Bleach.....quart.....	FB-99.....	12.64
Scouring powder.....14 ounces.....	FB-100.....	16.20
Floor wax.....pint.....	FB-101.....	4.33
Other laundry and cleaning supplies.....		(17)
Paper supplies:		
Towels.....150-sheet roll.....	FB-95.....	8.59
Napkins.....box of 80.....	H-764 Reg.....	15.40
Toilet tissue.....650-sheet roll.....	H-799 Reg.....	60.00
Shelf, wax paper, foil.....		(18)
Services and miscellaneous supplies:		
Launderettes.....pound.....	H-820 Reg.....	80.00
Miscellaneous supplies.....		(19)

<sup>1</sup> Requirements specified for fuel, utilities, and equipment do not apply when the cost of these items is included in the monthly rent.

<sup>2</sup> The code numbers identify the specifications used in pricing the articles and services for the budget; copies are available upon request.

<sup>3</sup> Heating fuel requirements vary with the length and severity of the cold season, type of structure, and type of heating equipment. The variation caused by climate is measured in standard British thermal units (convertible to equivalent quantities of fuel oil, gas, etc.) and the normal number of annual degree days in a given city, derived from annual data published by the U.S. Weather Bureau. (A degree day is a unit, based upon temperature difference and time, which measures the difference between the average temperature for the day and 65° F. when the mean temperature is less than 65° F.; the number of degree days for any one day is equal to the number of Fahrenheit degrees difference between the average and 65° F.) The average number of B.t.u.'s required in a given city may be computed as follows: Million of B.t.u.'s =  $-333,405 + 116.016$  times the logarithm of the normal number of annual degree days.

The quantity of any type of heating fuel used in a given city can be determined by converting the required number of B.t.u.'s into quantities of the type of fuel used. In the determination of the total amount of fuel required, both the average B.t.u. content and an assumed efficiency factor must be taken into consideration for each specified fuel.

<sup>4</sup> The kilowatt-hours of electricity required to operate oil or gas heating equipment vary according to the amount of fuel used. The average re-

quired number of kilowatt-hours assumed here is .25 per therm of gas and .44 per gallon of fuel oil.

<sup>5</sup> In cities where electricity is the predominant type of fuel used for cooking and hot water heating it was substituted for gas. The annual requirements are as follows: cooking, 1,800 KWH; hot water heating, 5,220 KWH.

<sup>6</sup> Costs paid directly by tenants.

<sup>7</sup> Cost is 30.0 percent of cost of Turkish towels.

<sup>8</sup> Cost is 20.0 percent of cost of itemized household textiles.

<sup>9</sup> Estimated cost in 1959 for all cities.

<sup>10</sup> Cost is 4.0 percent of cost of itemized furniture.

<sup>11</sup> Cost is 11.6 percent of cost of itemized electrical appliances.

<sup>12</sup> Cost is 62.9 percent of cost of sets of dishes.

<sup>13</sup> Cost is 15.4 percent of total cost of furniture, electrical equipment, and housewares.

<sup>14</sup> Requirements for tools, mending materials, and garden equipment vary according to the type of dwelling structure occupied by the family. The 1959 dollar allowance for families occupying single unit dwellings (\$14.46) was multiplied by the percent of all 5-room units of the budget specification represented by single family units in each city.

<sup>15</sup> Cost is 2.0 percent of cost of housefurnishings and equipment.

<sup>16</sup> Cost is 4.2 percent of cost of furniture and equipment.

<sup>17</sup> Cost is 15.4 percent of cost of itemized laundry and cleaning supplies.

<sup>18</sup> Cost is 25.2 percent of cost of itemized paper supplies.

<sup>19</sup> Cost is 8.9 percent of total cost of laundry, cleaning, and paper supplies.

generally accepted "scientific" standards comparable to those for food and housing.

However, the widespread use of insurance to cover the cost of major illness has, in part, provided a medical care standard. Therefore, a family membership in a group hospitalization plan is

specified for the budget, assuming the family will bear the full cost of its health insurance premiums. The revised quantities of medical care services not covered by insurance were derived from data provided by the U.S. National Health Survey conducted in 1957-58.

TABLE 7. ALL OTHER GOODS AND SERVICES BUDGET QUANTITIES

## 1. Clothing

[Quantities of starred items vary from city to city; see explanatory notes]

Group, item, and unit	Pricing code <sup>1</sup>	Quantity per year
<b>HUSBAND</b>		
Outerwear:		
Topcoats*.....	A-101 Alt.....	0.19
Jackets:		
Wool*.....	A-154 Reg. (A).....	.12
Leather*.....	A-148 Aux.....	.05
Other*.....	A-155 Reg. (A, B).....	.16
Sweaters*.....	X-201.....	.26
Suits:		
Wool, heavyweight (3-piece)*.....	X-202.....	.06
Wool, heavyweight (2-piece)*.....	A-110 Reg. (A, B); A-114 Reg. (A, B).....	.25
Wool, lightweight*.....	A-110 Reg. (A, B); A-114 Reg. (A, B).....	.19
Rayon*.....	A-120 Reg.; A-121 Alt.....	.02
Wool sport coats.....	X-203.....	.07
Trousers, slacks:		
Wool*.....	A-132 Alt.....	.58
Rayon*.....	A-137 Alt.....	.40
Work.....	A-170 Reg.....	.93
Dungarees.....	A-178 Reg. (A, B); A-179 Alt. (A).....	1.02
Shirts:		
Dress.....	A-200 Reg. (A); A-202 Reg. (B).....	2.14
Work, cotton.....	A-185 Reg.....	.99
Sports, wool*.....	FB-135.....	.27
Sports, cotton and other woven, and knit.....	A-216 Reg.....	1.51
Other outerwear*.....		( <sup>2</sup> )
Underwear, nightwear:		
Undershorts, woven*.....	A-234 Reg.; A-236 Alt.....	2.06
Undershorts, knit*.....	FB-137.....	2.02
Undershirts*.....	A-230 Reg.....	3.40
Pajamas.....	A-220 Reg. (A, B).....	.44
Bathrobes.....	X-204.....	.04
Hosiery:		
Cotton..... pair.....	X-205.....	8.28
Nylon..... do.....	A-247 Reg. (A, B).....	1.71
Rayon..... do.....	X-206.....	.59
Other..... do.....	X-207.....	.92
Footwear:		
Shoes:		
Street..... do.....	A-700 Reg.; A-702 Alt.; A-703 Reg.....	1.01
Work..... do.....	A-710 Reg.....	.47
Casual..... do.....	X-208.....	.11
House slippers..... do.....	X-209.....	.14
Rubbers and boots:		
Rubbers..... do.....	A-718 Aux.....	.09
Rubber boots*..... do.....	X-210.....	.08
Hats, gloves, accessories:		
Hats:		
Felt*.....	X-211.....	.48
Gloves:		
Dress*..... pair.....	X-212.....	.17
Work*..... do.....	X-213.....	2.19
Accessories:		
Ties.....	X-214.....	1.96
Handkerchiefs.....	X-215.....	3.66
Other accessories*.....		( <sup>2</sup> )

See footnotes at end of table.

TABLE 7. ALL OTHER GOODS AND SERVICES BUDGET QUANTITIES—Continued

1. Clothing		
[Quantities of starred items vary from city to city; see explanatory notes]		
Group, item, and unit	Pricing code <sup>1</sup>	Quantity per year
<b>Boy</b>		
Outerwear:		
Topcoats*.....	FB-146 (A).....	0.20
Jackets:		
Wool*.....	A-344 Reg. (A, B).....	.35
Other*.....	A-345 Reg. (A, B, C).....	.34
Sweaters*.....	A-331 Aux. (A).....	.51
Suits:		
Wool.....	FB-149.....	.27
Rayon.....	X-250.....	.01
Cotton.....	X-251.....	.06
Slack.....	X-252.....	.05
Wool sport coats.....	X-253.....	.03
Trousers, slacks:		
Wool*.....	FB-152 (A, B).....	.70
Rayon*.....	A-322 Alt.....	.26
Cotton*.....	FB-153.....	.86
Dungarees.....	A-362.1 Alt. (A, B); A-364 Reg.; A-365 Reg.....	3.26
Shirts:		
Dress.....	FB-164 (A, B).....	.97
Sports, cotton and other woven.....	A-371.1 Alt. (A, D); A-372 Alt. (A, D).....	2.11
Sports, knit.....	A-375 Aux.....	2.02
Other outerwear*.....		( <sup>9</sup> )
Underwear, nightwear:		
Undershorts, woven*.....	FB-166 (A, B).....	1.29
Undershorts, knit*.....	A-380 Reg.....	2.50
Undershirts*.....	X-264.....	2.75
Pajamas.....	X-254.....	.77
Bathrobes.....	X-255.....	.04
Hosiery:		
Cotton..... pair.....	FB-168.....	12.68
Footwear:		
Shoes:		
Street..... do.....	FB-226.....	2.33
Casual..... do.....	X-256.....	.69
House slippers..... do.....	X-257.....	.16
Rubbers and boots:		
Rubbers..... do.....	X-258.....	.09
Rubber boots*..... do.....	X-259.....	.22
Hats, gloves, accessories:		
Hats:		
Felt*.....	X-260.....	.12
Caps, helmets*.....	FB-169.....	.71
Gloves:		
Dress*..... pair.....	X-261.....	.80
Accessories:		
Ties.....	X-262.....	.63
Handkerchiefs.....	X-263.....	1.53
Other accessories*.....		( <sup>9</sup> )

See footnotes at end of table.



TABLE 7. ALL OTHER GOODS AND SERVICES BUDGET QUANTITIES—Continued

## 1. Clothing

[Quantities of starred items vary from city to city; see explanatory notes]

Group, item, and unit	Pricing code <sup>1</sup>	Quantity per year
<b>WIFE</b>		
Outerwear:		
Coats:		
Heavyweight*	A-415 Reg.	0.26
Lightweight	A-420 Reg.	.25
Sweaters*	A-471 Aux.	.62
Suits:		
Wool	A-430.1 Reg.; A-431.1 Alt; A-435.1 Alt	.24
Rayon	X-301	.21
Dresses:		
Wool*	A-490 Reg.; A-491 Alt.	.27
Cotton	A-495 Reg. (A, B)	1.06
Rayon	A-481 Reg.	1.09
Housedresses	A-498 Reg.	.96
Skirts	A-450 Aux.	.70
Blouses:		
Dacron	A-463 Alt.	.97
Cotton	A-462 Reg. (A, B)	.43
Nylon	A-464 Alt. (C)	.16
Slacks	X-302	.20
Other outerwear*		( <sup>2</sup> )
Underwear, nightwear:		
Slips:		
Nylon	A-532 Reg.	.56
Other	FB-187	1.15
Corsets	A-540 Reg.	.11
Girdles	A-541 Sup.	.43
Brassieres	A-545 Aux.	1.61
Panties:		
Rayon	A-536 Reg.	2.55
Nylon	FB-188	.57
Nightgowns and pajamas:		
Nightgowns, rayon	A-522 Reg. (A, B)	.57
Nightgowns, nylon	A-523.1 Reg.	.04
Pajamas	FB-185	.26
Robes	A-517 Sup.	.18
Hosiery:		
Nylon stockings	A-562 Alt. (A); A-563 Alt.	10.92
Anklets	X-303	1.26
Footwear:		
Shoes:		
Oxford	A-730.1 Reg.; FB-232	.76
Pump	A-734 Reg.	1.14
Casual	A-740 Reg.	.46
House slippers	X-304	.35
Rubbers, galoshes:		
Rubbers	X-305	.04
Galoshes*	FB-242	.11
Hats, gloves, accessories:		
Hats:		
Felt*	FB-192	.62
Other		( <sup>2</sup> )
Gloves:		
Leather*	X-306	.14
Other*	X-307	.60
Other accessories*		( <sup>2</sup> )

See footnotes at end of table.

TABLE 7. ALL OTHER GOODS AND SERVICES BUDGET QUANTITIES—Continued

1. Clothing		
[Quantities of starred items vary from city to city; see explanatory notes]		
Group, item, and unit	Pricing code <sup>1</sup>	Quantity per year
<b>GIRL</b>		
Outerwear:		
Coats:		
Heavyweight*.....	A-600 Reg.; A-601 Reg.....	0.35
Lightweight*.....	X-350.....	.31
Jackets, ski pants:		
Jacket.....	FB-205 (A, B).....	.21
Ski pants*.....	FB-206.....	.09
Snow suit*.....	X-351.....	.12
Sweaters.....	A-632 Reg. (A, B).....	1.47
Dresses:		
Cotton.....	A-612 Reg. (A, B).....	3.46
Skirts.....	A-620 Reg.; A-621 Alt.....	1.23
Blouses:		
Dacron.....	FB-202.....	.60
Cotton.....	FB-203.....	1.46
Other outerwear*.....		( <sup>9</sup> )
Underwear, nightwear:		
Slips:		
Cotton.....	A-664 Aux.....	1.89
Panties:		
Rayon.....	FB-212.....	4.37
Cotton.....	A-660 Reg.....	1.77
Pajamas.....	FB-209.....	1.11
Other underwear and nightwear.....		( <sup>9</sup> )
Hosiery:		
Anklets..... pair.....	A-670 Reg.....	12.03
Footwear:		
Shoes:		
Oxford..... do.....	FB-237 (A, B).....	1.76
Pump..... do.....	FB-239.....	1.05
Casual..... do.....	FB-240.....	.64
House slippers..... do.....	X-352.....	.26
Rubbers, galoshes:		
Rubbers..... do.....	X-353.....	.04
Galoshes*..... do.....	FB-242.....	.31
Hats, gloves, accessories*..... do.....		( <sup>9</sup> )
<b>CLOTHING MATERIALS AND CLOTHING SERVICES</b>		
Clothing materials:		
Wool..... yards.....	A-820 Aux. (B).....	0.80
Cotton..... do.....	A-810 Reg.....	7.40
Rayon..... do.....	A-800 Reg. (B).....	1.40
Other (yarn, pins, thread, etc.)..... do.....		( <sup>9</sup> )
Clothing services:		
Cleaning and pressing:		
Husband..... garment.....	H-831 Alt.....	9.49
Wife..... do.....	H-835 Reg.....	6.83
Children.....		( <sup>7</sup> )
Shoe repair:		
Women and girls:		
Lifts and heels..... number.....	A-796 Reg.....	3.41
Half soles and heels.....		( <sup>9</sup> )
Men and boys:		
Half soles and heels..... number.....	A-790 Reg.; A-791 Alt.....	1.24
Heels.....		( <sup>9</sup> )
Shoe shines, polish, laces, etc.....		( <sup>10</sup> )
Miscellaneous clothing services.....		( <sup>11</sup> )

See footnotes at end of table.

TABLE 7. ALL OTHER GOODS AND SERVICES BUDGET QUANTITIES—Continued

2. Medical Care			
Group and item	Pricing code <sup>1</sup>	Quantity per year	
Physicians' visits:			
Home.....	M-306 Reg.....	0.90	
Office.....	M-300 Reg.....	14.80	
Hospital.....	X-401.....	1.00	
Specialists' fees:			
Surgical procedures <sup>12</sup> .....	M-320 Reg.; M-324 Reg.; X-402; X-403; X-404.....	.16	
Dental care:			
Fillings.....	M-350 Reg.....	3.08	
Extractions.....	M-352 Reg.....	1.19	
Cleaning and examination.....	X-405.....	1.56	
Other.....			
Eye care.....			(13) \$13.11
Hospital services:			
Group hospitalization insurance plan <sup>13</sup> .....		1.00	
Other medical care.....			(14) \$8.47
Prescriptions <sup>17</sup> .....	FB-266; FB-267; FB-268; M-120 Reg.....	9.3	
Nonprescription drugs <sup>17</sup> .....	M-150 Reg.; M-161 Alt.; M-170 Reg.....	(14) \$20.55	
Appliances and supplies.....			(15)
3. Transportation <sup>19</sup>			
Group, item, and unit	Pricing code <sup>1</sup>	Quantity per year	
		Automobile owners	Non-automobile owners
Private transportation:			
Automobile:			
Replacement of automobile.....	T-220 Reg.; FB-247.....	0.284	
Operating expenses:			
Gasoline.....gallon.....	T-400 Reg.....	541.40	
Motor oil.....quart.....	T-410 Reg.....	37.40	
Lubrication.....	T-510 Reg.....	6.00	
Antifreeze <sup>20</sup> .....gallon.....	X-503.....	1.25	
Tires:			
New.....	T-302 Sup.....	1.01	
Used or recapped.....	FB-249.....	.31	
Batteries.....	X-504.....	.47	
Repairs and parts.....	T-500 Reg.; T-520 Reg.; T-530.1 Sup.; X-505.....	(21) \$57.64	
Registration fees:			
State.....annual.....	FB-252.....	1.00	
Local.....do.....	FB-253.....	1.00	
Inspection fees.....	T-654 Sup.....	(22) 2.00	
Operator's permit.....renewal.....	FB-254.....		
Insurance:			
Public liability.....annual.....	T-610.1 Alt.....	1.00	
Comprehensive.....do.....	FB-250 (a).....	.50	
Other operational expenses.....		(23)	
Public transportation:			
Local:			
School fares.....ride.....	X-506.....	60.00	84.00
All other.....do.....	T-801; T-821.....	169.00	626.00
Trips out of city.....mile.....	T-870.....	124.30	244.50
Moving household effects within city.....	X-507.....	(24) \$3.02	(24) \$3.02

See footnotes at end of table.

TABLE 7. ALL OTHER GOODS AND SERVICES BUDGET QUANTITIES—Continued

## 4. Reading and Recreation

Group and item	Pricing code <sup>1</sup>	Quantity per year
Reading materials:		
Newspapers (subscription).....	R-711 Reg.....	1.34
Books (not school).....		<sup>25</sup> \$4.94
Magazines.....		<sup>25</sup> \$14.73
Other expenses.....		( <sup>26</sup> )
Recreation:		
Radios, musical instruments, etc.:		
Radio.....	R-300 Reg.....	.147
Television set:		
Table model.....	R-105 Reg.....	.065
Console.....	R-151.1 Aux.....	.045
Phonograph.....	X-601.....	.053
Musical instruments.....		( <sup>27</sup> )
Repairs.....		<sup>28</sup> \$1.96
Admissions:		
Movies:		
Adult.....	R-600 Reg.....	27.8
Girl.....	R-604 Reg.....	25.8
Boy.....	R-604 Reg.....	38.0
Other admissions.....		( <sup>28</sup> )
Other recreation:		
Hobbies.....		( <sup>29</sup> )
Club dues.....		<sup>25</sup> \$7.17
Toys, sporting equipment, supplies for pets, etc.....		<sup>25</sup> \$46.11

## 5. Personal Care

Group, item, and unit	Pricing code <sup>1</sup>	Quantity per year
Services:		
Husband:		
Haircut.....	P-300 Reg.....	20.71
Shave.....		( <sup>30</sup> )
Wife:		
Haircut.....		<sup>31</sup> \$1.63
Permanent wave.....	P-316 Reg.....	.50
Wave and shampoo.....	P-310 Reg.....	2.19
Boy: Haircut.....	FB-281.....	14.53
Girl: Haircut.....		<sup>31</sup> \$0.95
Family: Other services.....		( <sup>32</sup> )
Commodities:		
Toilet soap..... bar.....	P-101 Reg.....	104.00
Cleansing tissue..... box of 400.....	P-164 Reg.....	20.85
Toothpaste..... ounce.....	P-130 Reg.....	41.15
Shaving cream..... do.....	P-114 Reg.....	33.47
Shampoo..... do.....	P-140 Reg.....	37.84
Home permanent supplies..... refill.....	P-150 Reg.....	1.52
Cosmetics.....		<sup>31</sup> \$7.67
Sanitary supplies..... box of 12.....	P-160 Reg.....	9.28
Razors, blades, nail files.....		<sup>31</sup> \$4.92
Other commodities.....		( <sup>33</sup> )

## 6. Tobacco

Item and unit	Pricing code <sup>1</sup>	Quantity per year
Cigarettes..... pack.....	0-100 Reg.; 0-104 Reg.; 0-120 Reg.; 0-121 Reg.....	304.5
Cigars..... each.....	0-200 Reg.....	51.0
Pipe tobacco..... ounce.....	FB-291.....	13.0
Pipe and smoker's supplies.....		( <sup>34</sup> )

See footnotes at end of table.



TABLE 7. ALL OTHER GOODS AND SERVICES BUDGET QUANTITIES—Continued

7. Public School Expense		
Group	Item	Quantity
Instructional supplies.....	Textbooks, classroom supplies, laboratory fees, instructional excursions.	As required in each community for boy (in ninth grade) and for girl (in third grade) who attend public school and purchase items not supplied free.
Athletic supplies.....	Gymnasium fees, athletic equipment and clothing. Dues, school movies, and other entertainments in which pupils participate.	
Associations and entertainment.....		
8. Communications		
Item		Quantity per year
Residential telephone service.....		(11)
Postage.....		
Stationery.....		
		\$8. 63
		\$7. 27
9. Gifts and Contributions		
Group	Item	Quantity per year
Gifts and contributions.....	Christmas, birthday, and other presents to persons outside the immediate family and contributions to church and charities.	2.4 percent of total cost of goods and services.
10. Miscellaneous		
Group	Item	Quantity per year
Miscellaneous items.....	Lodging away from home, music and dancing lessons for the children, legal expenses, and other unspecified items.	0.8 percent of total cost of goods and services.

<sup>1</sup> The code numbers identify the specifications used in pricing the articles and services for the budget. A detailed description of the items is available upon request.

<sup>2</sup> Cost is a specified percentage of total cost of itemized outerwear, adjusted for intercity variations due to climatic differences. The percentages are as follows: Husband, 3.7 percent; boy, 6.5; wife, 3.3; and girl, 16.1.

<sup>3</sup> Cost is a specified percentage of the total cost of clothing, adjusted for intercity variations due to climatic differences. The percentages are as follows: Husband, 4.1 percent; boy, 1.1; wife, 5.8; and girl, 6.4.

<sup>4</sup> Cost is 11.3 percent of total cost of itemized underwear and nightwear.

<sup>5</sup> Cost is 71.7 percent of cost of felt hats.

<sup>6</sup> Cost is 38.0 percent of cost of itemized clothing materials.

<sup>7</sup> Cost is 25.1 percent of cost of adults.

<sup>8</sup> Cost is 120 percent of the cost for lifts and heels.

<sup>9</sup> Cost is 25.7 percent of the cost of half soles and heels.

<sup>10</sup> Cost is 23.2 percent of total cost of shoe repair.

<sup>11</sup> Cost is 9.1 percent of total cost of itemized clothing services. This group includes cleaning and blocking of hats, jewelry and watch repair, tailoring, and clothing repair.

<sup>12</sup> The cost is a weighted average of the fees charged for operations selected to represent all types of surgical procedures.

<sup>13</sup> Cost is 41.8 percent of total cost of itemized dental procedures.

<sup>14</sup> Estimated average cost in 1959; differs from city to city.

<sup>15</sup> The budget includes 1 family membership in a group hospitalization insurance plan. In cities where plans do not fully cover the cost of hospital ward accommodations and specified ancillary services, an additional allowance covering the cost of these benefits is provided.

Footnotes continued on p. 802.

For other goods and services, the revised quantities were derived, primarily, by examining the quantity-income elasticities of the expenditures of 4-person, budget-type families, as reported in the Bureau's Survey of Consumer Expenditures in 1950. This technique, which was developed for the original budget, is objective in that it uses the consumers' collective judgment as to what is adequate for such items as clothing and house-furnishings—a standard determined by the families themselves.

In this technique, the quantities of various items purchased at successive income levels are examined to determine the income level at which the rate of increase in quantities purchased begins to decline in relation to the rate of change in income, i.e., the point of maximum elasticity. The average numbers and kinds of items purchased at these income levels are the quantities and qualities specified for the budget. This point has been described as the point on the income scale where families stop buying "more and more" and start buying either "better and better" or something else less essential to them.<sup>11</sup>

The analysis of prewar expenditure data for the original budget showed a characteristic pattern of changes in the quantities of goods and services within a group of related items in relation to changes in income. Quantities at first increased relatively more rapidly than income and then increased at a relatively slower rate than the increase in income, i.e., the income elasticity rose to a maximum and then declined progressively at higher income levels. The budget quantities were those at the points where the purchase rate began to decline.

In the analysis of the 1950 consumer expenditure data, the characteristic pattern was found for most groups of goods and services, but for underwear and nightwear, hosiery, footwear, and furniture and equipment, this was not true. Within the range of the data, the maximum elasticity was at the initial income classes. In the 1950 survey, there were no budget-type families with income after taxes of less than \$2,000, and the initial income classes were \$2,000–\$3,000 and \$3,000–

<sup>11</sup> For detailed description, see BLS Bull. 927, op. cit., p. 13.

Table 7 footnotes—Continued.

- <sup>12</sup> Estimated cost in 1959 for all cities.  
<sup>13</sup> Average prices for items selected to represent all types of prescriptions and nonprescription drugs commonly required by the family weighted by their relative importances in the category of therapeutic end-use in which they were classified.  
<sup>14</sup> Cost is 4.7 percent of total cost of prescriptions and drugs.  
<sup>15</sup> The mode of transportation within metropolitan districts is related to location, size, and characteristics of the community. The average cost of automobile owners and nonowners were weighted by the following proportions of families: for 3 cities in the Northeast region (New York, Philadelphia, and Boston) 48 percent for automobile owners, 52 percent for nonowners; for the remaining 17 cities for which budget costs were computed, 76 percent and 24 percent, respectively.  
<sup>16</sup> Cost excluded in cities with mild climate.  
<sup>17</sup> Estimated average cost in 1959. This total varies for individual cities according to differences in cost of labor and parts.  
<sup>18</sup> The number of inspections required by law in each city.  
<sup>19</sup> Cost is 4.3 percent of the allowance for gasoline, motor oil, lubrication, tires, batteries, and repairs.  
<sup>20</sup> Average cost in 1959 of 20 cities.  
<sup>21</sup> Estimated cost in 1959 for all cities.  
<sup>22</sup> Cost is 1.7 percent of annual allowance for itemized reading materials.  
<sup>23</sup> Cost is 13.9 percent of annual allowance for radios, television sets, and phonographs.  
<sup>24</sup> Cost is 23.8 percent of annual allowance for movie admissions.  
<sup>25</sup> Cost is 11.5 percent of annual allowance for reading materials, admissions, radios, television sets, and phonographs.  
<sup>26</sup> Cost is 0.6 percent of annual allowance for husband's haircuts.  
<sup>27</sup> Estimated cost in 1959 for all cities.  
<sup>28</sup> Cost is 2.2 percent of annual allowance for itemized personal services.  
<sup>29</sup> Cost is 10.9 percent of annual allowance for itemized commodities.  
<sup>30</sup> Cost is 1.1 percent of annual allowance for itemized tobacco products.  
<sup>31</sup> All families were assumed to have telephone service at minimum cost with provision for 65 message units per month.  
<sup>32</sup> Estimated cost in 1959 for all cities.

#### EXPLANATORY NOTES:

The basic clothing budget is the average quantity for large cities and their suburbs. For each city, the quantities of clothing articles specified in the following tabulation are adjusted upward or downward in accordance with local climatic conditions, on the basis of the normal number of annual degree days as published by the U.S. Weather Bureau. The tabulation shows the quantities of specified items of clothing required when the normal number of annual degree days average 1,400 and 7,850. (For definition of degree day, see footnote 3, table 6.) The quantities required for specific cities were determined by straight-line interpolation.

Item		Normal number annual degree days		Item		Normal number annual degree days	
Husband		7,850	1,400	Boy		7,850	1,400
Topcoat.....	0.28	0.08		Topcoat.....	0.28	0.10	
Jackets:				Jackets:			
Wool.....	.13	.10		Wool.....	.37	.33	
Leather.....	.06	.04		Other.....	.36	.32	
Other.....	.18	.14		Sweater.....	.54	.47	
Sweater.....	.28	.23		Slacks:			
Suits:				Wool.....	.73	.65	
Wool, heavyweight (3-piece).....	.07	.05		Cotton.....	.73	1.02	
Wool, heavyweight (2-piece).....	.30	.19		Rayon.....	.22	.31	
Wool, lightweight.....	.14	.25		Other outerwear <sup>1</sup> .....	6.3%	6.8%	
Rayon.....	.01	.03		Undershorts, woven <sup>2</sup> .....	1.25	1.31	
Trousers, slacks:				Undershorts, knit <sup>2</sup> .....	2.64	2.38	
Wool.....	.62	.53		Undershirts <sup>2</sup> .....	2.83	2.67	
Rayon.....	.27	.58		Rubber boots.....	.40	0	
Sports shirt, wool.....	.30	.24		Hat, felt.....	.16	.07	
Other outerwear <sup>1</sup> .....	3.0%	4.4%		Caps and helmets.....	.94	.43	
Undershorts, woven <sup>2</sup> .....	2.01	2.12		Gloves, dress.....	1.44	.04	
Undershorts, knit <sup>2</sup> .....	2.22	1.78		Other accessories <sup>2</sup> .....	1.0%	1.2%	
Undershirts <sup>2</sup> .....	3.54	3.22					
Rubber boots.....	.15	0		Girl			
Hat, felt.....	.50	.46		Coat, heavy weight.....	0.44	0.18	
Gloves, dress.....	.28	.04		Coat, light weight.....	.36	.26	
Gloves, work.....	3.62	.46		Snow suit.....	.21	.01	
Other accessories <sup>2</sup> .....	3.9%	4.4%		Ski pants.....	.16	.01	
Wife				Other.....			
Coat, heavy weight.....	0.34	0.16		outerwear <sup>1</sup> .....	14.0%	19.2%	
Sweater.....	.69	.53		Galoshes.....	.54	.02	
Dress, wool.....	.30	.23		Total hats, gloves accessories <sup>2</sup> .....	7.3%	5.3%	
Other outerwear <sup>1</sup> .....	2.9%	3.9%					
Galoshes.....	.20	.01					
Hat, felt.....	.74	.49					
Gloves, leather.....	.18	.09					
Gloves, other.....	.76	.41					
Other accessories <sup>2</sup> .....	5.5%	6.1%					

<sup>1</sup> The requirements are stated as percentages of total cost of itemized outerwear.

<sup>2</sup> Only lightweight underwear was priced. The climatic adjustment of the quantities allows for substitution of heavyweight underwear in cold climates.

<sup>3</sup> The requirements are stated as percentages of the total cost of clothing.

TABLE 8. BUDGET QUANTITIES FOR OTHER COSTS AND TAXES

Group	Item	Quantity per year
Occupational expenses	Dues to unions, business or professional associations; special clothing and equipment required for the occupation.	These items, which are included in the estimated total cost of the budget as an average outlay of \$28, should be determined for each individual situation.
Insurance	A life insurance policy to provide for the family during a period of adjustment in event of the death of the breadwinner. The premium should be determined for individual situations by taking into account the group insurance in effect, as well as the type of protection provided.	Insurance is included in the estimated total cost of budget at the average outlay of \$110.
Social security deductions	Employee contributions for Federal old-age, survivors', and disability insurance and for disability insurance where required by State law.	As required by the level of the total budget.
Taxes	Personal taxes, such as poll and other capitation taxes and income taxes (Federal, State, and local).	Rates applicable in 1959 in each city.

\$4,000. Since the original budget total for goods and services when priced in 1950 was also in the \$3,000 to \$4,000 range, the revised quantities for these groups of commodities were determined from that income class. Although the use of this point of maximum elasticity is not believed to represent a serious deviation from the concept of the original budget, it does point up the need for a thorough review and reappraisal of the concept and techniques for any future revision.

Budgets derived by the quantity-income elasticity technique should reflect changes in the standard of living which accompany changes in the level of real income. The revised list of goods and services in the budget reflects the higher standard of living which has followed a long period of rising real income and widespread changes in consumer markets and purchasing patterns. To the extent that the quantities of goods and services other than food, housing, and medical care have increased as a result of the rising real income since 1950, the budget quantities tend to err on the low side, since they were based on 1950 spending patterns. On the other hand, the quantities derived from the 1950 expenditure data are higher than those now required for certain items because of greater durability or other technological improvements. More important in the use of these revised quantity budgets for clothing and durable goods is the fact that budgets derived in this manner reflect replacement rates based on the average

inventories of budget-type families at the date of the expenditure study.

Individual preferences play a large part in the way families spend their money, so that even among families of the same economic level, such as the one represented by the budget, some variation occurs in what is considered necessary for clothing, transportation, recreation, tobacco, etc. Therefore, the allowances provided for these items are not suggested as a spending plan for an individual family. Instead, the budget represents a composite of individual choices which vary widely both within and between major categories.

The revised list for clothing reflects the trend to less formal apparel and differs from the original budget more in the types of garments than in the quantities. For example, the boy's clothing budget includes more jackets and slacks and fewer coats and suits. As before, the quantities of clothing are adjusted for intercity variations as required by differences in climate.

The transportation budget again provides for the purchase of a used car every 3 years but has somewhat more generous provisions for operating expenses. Auto ownership by 76 percent of the families is specified for all cities except New York, Philadelphia, and Boston, where 48 percent ownership is assumed. In the original budget, Chicago was classified in the low-ownership cities and Boston in the high group. They were reclassified on the basis of the 1950 survey.

Among the other categories, the revised budget includes a telephone, not previously included, and provides for the maintenance and replacement of a television set, which was not a part of the prewar consumption pattern.

### Pricing the Budget

After the items and quantities to be included in the budget were determined, it was necessary to price the kinds and qualities of these commodities and services normally purchased by budget-type families in the types of stores and professional and service establishments customarily patronized by city workers' families. All items included in the budget could not be priced, but prices were obtained for most of them. Tables 5-7 include a pricing code which designates the specification used for those items which were actually priced or for which prices were estimated from similar items. For other items, values were estimated.

In general, the items not priced include those which are purchased infrequently or represent an insignificant proportion of the total budget, those which represent a wide variety of choices, and those for which specifications describing definite and limited quality ranges cannot be written. In some cases, estimates were made on the basis of known relationships of the unpriced item to some priced item; for example, the price of a single upholstered chair was estimated as a proportion of the price actually obtained for a living room suite. For groups of miscellaneous items that are impractical to price, such as "yarns, pins, material, thread, etc.," 1950 allowances were adjusted to 1959 by price change.

The prices, pricing procedures, reporting stores and service establishments, and price calculation methods were those used by the Bureau for the Consumer Price Index except that more price quotations were obtained in some cases to permit calculation of average prices and different qualities were priced in other cases to represent the budget levels.

For goods and services determined from the 1950 expenditure data, the qualities were those purchased at the income levels from which the quantities were derived. The 1950 prices related to the specified qualities were adjusted to 1959 by changes in CPI prices and compared with the

current prices collected for the index. If the two were not comparable, the specifications were adjusted to describe the quality level defined for the budget. New specifications were written where no related specification existed.

These specifications describe the items in detail but permit some range of quality such as minor differences in construction, styling, features, and fabric. They are prepared with the advice of manufacturers, trade associations, and retailers who know the article and the quality factors that differentiate prices and who can identify them in terms familiar to the personnel of sample stores.

The price specifications may be very simple, as in the case of cigarettes:

Description: Plain tip.

Size: Regular.

Pricing unit: Multiple unit pricing, six or less packages of 20.

On the other hand, they may often be quite detailed, in order to spell out all factors that determine quality, as for example the following specification for business shirts:

Style: Business shirt; fused or similarly constructed collar, or soft collar, attached; barrel or convertible cuffs; may have permanent or removable stays; *exclude* long-wearing cuffs for wash-and-wear finish.

Fabric: White broadcloth; combed cotton yarn; thread count (gray) and finish: A. 136 x 60 or 128 x 68, regular finish, 1 percent or less residual shrinkage. B. 136 x 60-68 wash-and-wear finish (little or no ironing required), 1 percent or less residual shrinkage.

Construction: Full cut; 31 to 32 yards per dozen, based on 36" fabric and neckband size scale 14 to 17; clean workmanship.

Brand: Manufacturer's, nationally advertised.

Prices were collected personally by Bureau representatives in retail and service establishments for most goods and services.<sup>12</sup> Prices obtained were those actually being charged on the day of the agent's visit. Sale prices were accepted for food items if the sale extended over a period of 1 week and for other items if the sale extended 2 weeks or more, on the assumption that a large proportion of families would take advantage of such sales. In all cases, prices include State or city retail sales taxes and, where applicable, Federal, State, or local excise taxes.

<sup>12</sup> For items that are easily defined, such as gas, electricity, heating fuels, newspapers, and several items of automotive transportation, prices were collected by special mail questionnaire or from authoritative trade sources.



Prices used in the budget refer to September, October, or November, 1959, depending upon the regular cycle for CPI pricing in these 20 cities. The budget costs, therefore, represent the cost of an annual budget but at autumn 1959 prices. Prices were not adjusted for seasonal variation. For a few items of a highly seasonal nature, such as spring and summer clothing, which were not available in most stores during the fall, prices used were those obtained at the last pricing during the spring of 1959.

Differences in availability of goods in different regions of the country precluded the pricing of identical goods and services in all areas. Wherever possible, the Bureau eliminated regional differences in qualities of the item specified for the budget through the use of estimates of value differences based on observed price relationships. The problems raised by such differences may be illustrated by cooking stoves. In most cities priced for the budget, gas ranges are the predominant type sold. In these cities, gas ranges only were priced, since electric ranges were available only in limited quantities. In a few cities, however, the reverse was true. In these cities, electric ranges are sold in volume and were therefore priced. The volume-selling gas ranges in some cities are not comparable to the most popular types of electric ranges in other cities, either in price or in styling and features. While comparisons of the prices of such dissimilar items between cities do not represent differences in prices for comparable items, they do accurately represent differences in the cost of cooking stoves since the items priced in each city are purchased in greatest volume by workers' families in these cities.

Changes in styling and construction of many items, particularly household appliances, between 1950 and 1959 raised problems in determining the appropriate 1959 quality levels. Where possible, prices were collected for items corresponding to 1950 quality levels, or prices for similar items were properly adjusted to bring them into line with these levels. Where articles were not comparable between the two periods, items of the types and qualities purchased by city workers in 1959 were selected for pricing. In 1959, for example, the volume-selling refrigerator measured 11 cubic feet and was equipped with a full-width frozen food storage compartment and many other fea-

tures not found in the 1950 model, which was also smaller. Therefore, the volume-seller in 1959, which represents a higher quality than the 1950 refrigerator, was used for the budget.

The pricing procedures for the various groups of goods and services are outlined in the remainder of this section, and some of the more difficult areas of pricing are touched upon in that discussion.

*Food.* Prices used for food for home consumption were those collected regularly for the Consumer Price Index from a representative sample of outlets in each of the 20 large cities. All of the important food chain stores and a sample of independent stores are included in each city. The sample of independent stores represents stores of various types (e.g., groceries and meat markets), stores at all levels of annual sales volume, and stores in different locations within the city.

The average prices for each food were obtained by averaging independent and chain store prices separately and then combining them with weights representing the relative volume of food sales by all food stores of each type in the city.

The unit cost of each of 10 food groups from the low- and moderate-cost food plans in the budget was estimated by applying a system of weights to the prices of the individual food items included in each major food group. The weighting factors take into consideration regional preference patterns in the selection of individual items. They also adjust for differences between item prices obtained by the BLS in the individual city in the spring of 1955 and the estimated prices paid for the same items by nonfarm families in two selected income classes based on Agriculture's 1955 Survey of Household Food Consumption. These spring 1955 costs of the individual items in each city were adjusted to October 1959 by a special calculation of item price changes.

In calculating the cost of food away from home, the average price of ten popular lunches (either entree, vegetable(s), dessert, and beverage or sandwich, dessert, and beverage) were used. These lunches were priced in restaurants and cafeterias, including in-plant cafeterias, usually patronized by the wage earners or clerical workers.

The cost of snacks was estimated on the basis of the average change in food store prices for

cola drinks, vanilla cookies, ice cream, and chocolate bars. This average price change was applied to the 1950 expenditure for snacks to calculate a current budget allowance.

**Housing.** The standard for rental housing specified in the budget was described as follows for pricing:

Five-room dwelling—house or apartment—including kitchen with sink and stove, hot and cold running water; with a complete private bath including wash bowl, flush toilet, and tub or shower; electricity for lighting; and installed heating, either central or other type, such as base burner, pipeless furnace, or stoves, depending upon the climate of the specific city. (Central heating required in cities where normal January temperature is 40° F. or colder, and central or other installed heating for cities with warmer climates.)

Exclude dwellings needing major repairs, i.e., structural repairs such as roof, walls, or foundation, but include those needing minor repairs such as painting or papering.

Located in a neighborhood with play space for children (yards, playground, park, or roped off street, accessible without serious traffic hazards); within 10 blocks of public transportation; and not adjacent to either a refuse dump or to more than one of the following hazards or nuisances: railroad or elevated tracks, noisy or smoke- and fume-developing industrial installations, main traffic artery, or intercity truck route.

Exclude dwellings above the standard, i.e., those with more than one complete private bath, substantially above the average size for five-room dwellings in the city, or those located in an apartment structure providing "luxury" services.

Rental rates for dwellings which met these standards were obtained for October 1959 by Bureau representatives from tenants of such dwellings during the regular rent survey. Since monthly contract rents in apartment structures usually include not only the cost of shelter but also water, heat, light, cooking fuel, refrigerator, etc., the cost for these items was added to the contract rent for dwellings whose tenants paid separately for them.

Prices of durable housefurnishings, which are included in the housing component, were collected in a representative sample of department stores, furniture stores, and appliance stores in central and neighborhood shopping areas. The sample for household appliances includes discount houses in cities where these stores account for a significant share of purchases by city workers' families.

CPI pricing procedures, under which a relatively greater number of quotations is obtained for ap-

pliances, were further extended to minimize the effects on average prices of extreme discounting or special promotions of a single brand. Prices were obtained for one model of each brand meeting the specification carried in each outlet.

The supplies necessary for household operation, such as soaps, detergents, bleaches, and scouring powders, were priced in a representative sample of both chain and independent grocery stores in each of the 20 large cities. Average prices were computed by the method described for food.

**Other Goods and Services.** About 100 items of clothing were selected for pricing on the basis of their relative importance in the budget-family purchases. In some instances, goods on the market had changed so greatly that the particular item purchased in 1950 was no longer representative of purchases in 1959, and a substitute was priced. For example, in 1950 wool and nylon were the two most popular women's sweater materials, but by 1959 orlon outranked both, so an orlon sweater was priced for the budget. The expanding use of new fabrics, new textile finishes, and blends of manmade and natural fibers has made it difficult to obtain adequate prices for a specification that narrowly defines the fabric. Thus it was decided, for example, to price both wool and wool-blend boys' trousers and both regular and wash-and-wear fabrics for girls' cotton dresses, men's shirts, and pajamas.

For certain items known to have a wide price range, two or three volume sellers for each specification were priced in each store so as to yield a representative average price. This technique was used for several items such as coats, suits, dresses, and footwear. However, when a particular volume seller clearly dominated the market in a given city, it was used in the budget for that city even though it differed in quality from those priced in other cities.

A number of the specifications include different quality (or price) levels. Each quality variation was priced in each outlet in each city in order to achieve comparability among cities. For some specifications, such variations are numerous. In men's dungarees, for example, four variations were priced—regular cut and western cut for both nationally advertised and other brands. In addition, an alternate quality in a heavier weight denim was priced.

In the medical care budget, prices and fees were obtained for the most important medical supplies and services. Since the majority of the population currently is covered by some type of hospitalization insurance, the cost of a group plan was included in the budget for each city. In some instances, the plan did not cover the full cost of ward accommodations and various ancillary services. Therefore, additional cost was added to the budget to cover these items.

Fees reported by general practitioners, dentists, and specialists (where appropriate) were used in calculating the cost of the professional services. Prices for prescriptions and nonprescription drugs were obtained in at least four drugstores in each city, with representation of both chain and independent stores located in neighborhood and downtown areas. Average prices for each prescription and over-the-counter drug preparation were weighted by their relative importance in the particular category of therapeutic end-use and its importance in total drugstore sales of prescriptions and nonprescription products. The cost of other medical services and supplies was estimated from known price relationships and various schedules of fees.

In the transportation subgroup, the net purchase price of used Chevrolet, Ford, or Plymouth sedans in two price series (after deducting the value of a trade-in and including all taxes) was used in the budget. A 1955 model was considered the most usual purchase by this family and since the trade-in was determined to be approximately 7 years old, the value of a similar 1952 model was deducted. Fall 1959 prices for 1952 and 1955 used cars were obtained from secondary sources.

Prices of the most frequent types of repairs, such as brake relining and front-end alignment, were obtained from dealers and general repair shops. The cost of chassis lubrications, obtained from service stations and a dealer repair shop, also was included. For other operating expenses, such as insurance, licenses, and registration fees, data were obtained from manuals furnished by automobile associations and insurance agencies.

Cash, ticket, or token rates (whichever was least expensive) for public transportation within the city were obtained from the local transportation companies in all 20 cities. School fares were also obtained. Railroad fares, including excise taxes, were obtained from a central source.

Prices for some of the articles and services necessary for personal care were collected in drug stores, barber shops, beauty shops, etc., representing, where necessary, both downtown and neighborhood locations. Prices for other personal care items were estimated on the basis of known price relationships.

For tobacco products and alcoholic beverages, prices were obtained from drug stores, tobacco shops, liquor stores, and grocery stores. Prices used included all applicable taxes.

### Uses and Limitations<sup>13</sup>

The City Worker's Family Budget is designed to measure the total cost of a specified standard of living for a self-supporting family of a specified size, age, and composition, residing in a rental dwelling in a large city or its suburbs. As a benchmark statistic, estimates of its total cost are an essential part of general economic and social research designed to measure changes in the standard of living, to evaluate the adequacy of family income, and to measure differences in living costs from place to place or among different types of families. The quantities and kinds of goods and services which make up the budget provide guides for appraising the content of living and establishing needs in various situations. For most administrative purposes, the content and cost of the component parts of the budget are more useful than the total budget cost estimates. By examining the kinds and amounts of goods and services provided by the specific standard, standards appropriate to particular program goals and to particular situations can be developed. But certainly the City Worker's Family Budget is not a ready-made answer to all the problems which require estimates of budget costs.

Since it has been priced only in 20 of the largest cities of the country, the budget costs given in this report are not representative of the costs in all large cities or of those in cities of other sizes and economic characteristics. Neither are they representative of costs in these 20 cities at other dates.

Differences between the 1959 costs of the revised budget and the costs of the original budget when last priced in these cities in 1951 reflect not

<sup>13</sup> Only the broad limitations of the budget are discussed in this section; those relating to particular components have been indicated in the discussion at appropriate points. A more detailed statement on the budget's uses and limitations is available on request.

only increases in prices and taxes, but also the higher standard of living provided by the revised list of goods and services. In most of these cities, the standard of living provided by the revised list of goods and services is from 20 to 25 percent higher than that provided by the original budget based on prewar standards and patterns of consumption.

The total budget costs are often used to measure the adequacy of income for various purposes. Because of its concept, definitions, and coverage, estimates of the total cost of the City Worker's Family Budget can be compared directly only with the total annual income of 4-person families of similar type, residing in cities of the same size class and economic characteristics. The budget total should not be compared directly with general levels of industrial wages and wage rates or with average income of all urban families. The budget represents a level of income about 15-20 percent below the estimated average 1959 income of budget-type families (that is, 4-person, 1-earner families in large cities).

The budget provides a measure of differences in living costs between cities, and not differences in prices only. In addition to differences in price

levels, intercity indexes based on the budget reflect climatic or regional differences in the quantities and types of items required to provide the specified standard of living and differences in State and local taxes. The relative differences in costs are those of established families in each city and will not reflect differences in cost associated with moving from one city to another. For example, the rental cost in this budget is the average for occupied dwellings of a defined specification and may vary considerably from that of dwellings available for new residents. The budget provides a comparison of costs for a 4-person family residing in a rental dwelling and eating most of its meals at home. It is not a valid measure of the difference in cost for persons who live in rooms and eat in restaurants, for travelers residing in hotels, or for homeowners.

The total budget costs are for a 4-person family of specified age and composition. The budget totals cannot be used without adjustments for other sizes or types of families. The budget has been priced only in these 20 cities and cost estimates are not available for other cities or for the United States city average.



# Trends in Earnings of Factory Workers, 1947 to 1960

IRVING STERN AND HERMAN TRAVIS \*

FACORY PRODUCTION WORKERS, who accounted for one of every four workers on nonfarm payrolls in 1959, have made notable gains in hourly and weekly earnings since World War II. Despite three recessions, their earnings have risen by about 80 percent in current dollars and by about 40 percent in dollars of constant purchasing power. Furthermore, some gains in income have not been reflected in the ordinary measures of earnings. These increments have come largely from pension, supplemental unemployment benefit, and health and welfare contributions of employers. In addition, although there has been no discernible pattern in changes in the standard workweek or in hours of work paid for, there has been a gain for the workers through the spread of vacations with pay and from increases in paid sick leave and paid holidays.

The increases in fringe benefits and in paid leisure are an interesting new area of improvement in the workers' level of living. The present study, however, is devoted to the changes that have taken place in factory workers' hourly and weekly earnings, the relationship of these changes to higher wages and variations in overtime work, and the effect of general economic setbacks on the growth rate of these earnings.

Some of the more important highlights of the earnings situation, which will be discussed in this article, are:

—The rise of about 80 percent in the weekly earnings of factory production workers has been the result mainly of higher wage rates, rather than of longer hours worked.

—Even with the large rise in prices since 1947, factory workers' "real" earnings have increased by about 40 percent.<sup>1</sup>

—Although growth in factory workers' real earnings has been rapid during the postwar period as a whole, the rate of growth has been temporarily dampened or reversed during each of the three postwar business downturns, with the effects becoming progressively greater in each succeeding recession.

—The 1957-58 recession affected factory workers' earnings mainly through reductions in overtime work, which had accounted for about 10 percent of total earnings before the recession.

—Straight-time hourly earnings—roughly indicative of wage rates<sup>2</sup>—did not decline during the three recessions, although they did not rise during the latter phases of the first two.

—The spread between high-wage and low-wage manufacturing industries has grown in the postwar period.

## Long-Term Trends in Factory Workers' Earnings

A brief glance at earlier developments adds some perspective to the analysis of postwar changes in factory workers' earnings. In 1909, the first year for which BLS data comparable with later periods are available, a factory production worker earned \$9.84 for a 51-hour week. By 1914, weekly earnings averaged \$11.01 for a workweek of 49.4 hours.

Since 1914, weekly earnings of factory production workers have increased sevenfold; but after allowing for the rise in consumer prices, the gain in real earnings has amounted to 180 percent, a growth averaging 2.3 percent a year. As might be expected from the major upheavals of war and depression which occurred during the period, the rate of growth has been uneven.

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<sup>1</sup> References to real earnings in this article apply to gross earnings deflated by the Consumer Price Index to 1947-49 dollars of purchasing power.

<sup>2</sup> There is no continuous, overall measure of wage rates as such; throughout this article, the figures on average hourly earnings exclusive of overtime have been used as an indicator of wage rate trends and a rough approximation of average wage levels. It must be remembered that the figures include premium pay for shift differentials and under incentive plans, and other pay above the basic wage rate. Moreover, the averages will change when there are shifts in relative employment between high- and low-wage occupations and industries even when specific wage rates have not been changed. However, industry employment changes did not significantly affect the overall trend between 1947 and 1960, or comparisons between other "normal" (non-recession and nonwar) years.

During the boom of World War I, money earnings rose faster than during any later period, but prices also rose rapidly. The annual growth in real earnings between 1914 and 1919 amounted to 3.1 percent.

After a sharp readjustment in 1921, the upward push resumed, but with considerably less momentum than during the war years. Even though prices remained almost steady, the annual growth in real earnings (1.3 percent) during the twenties was less than half that of the wartime period.

During the thirties occurred the anomalous situation in which real earnings rose even though money earnings actually declined by a small amount. The drop in prices was great enough to boost real earnings—for those who remained employed—even more rapidly than during the prosperous twenties.

During World War II, factory workers' real earnings grew at an especially rapid rate (6.2 percent), four times as rapidly as during the thirties and twice as rapidly as during World War I.

**Chart 1. Employment, Hours, and Earnings of Factory Production Workers, January 1947–May 1960**

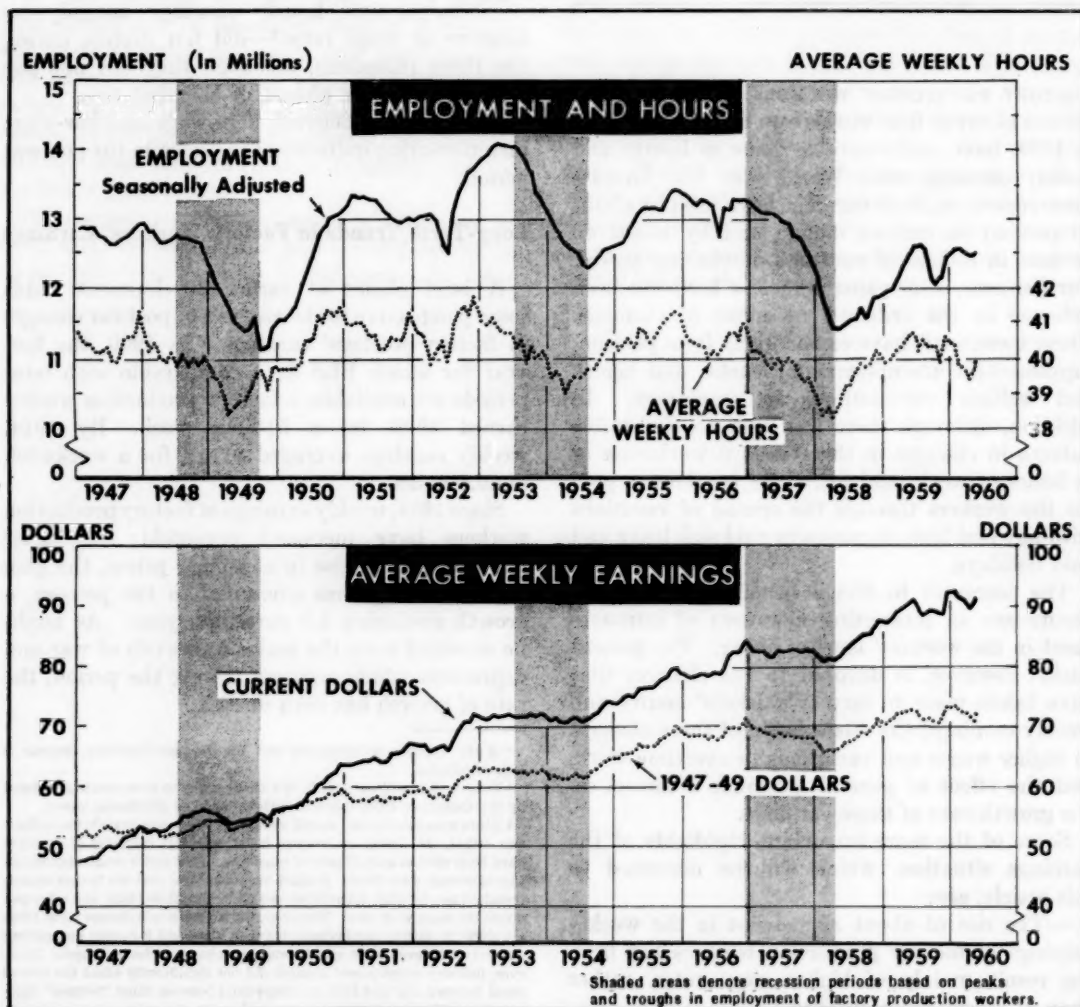


TABLE 1. GROSS AVERAGE WEEKLY EARNINGS OF FACTORY PRODUCTION WORKERS, BY MAJOR INDUSTRY GROUP, 1947-59

Major industry group	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
In current dollars													
Manufacturing.....	\$49.97	\$54.14	\$54.92	\$59.33	\$64.71	\$67.97	\$71.69	\$71.86	\$76.52	\$79.99	\$82.39	\$85.50	\$89.47
Durable goods.....	52.46	57.11	58.03	63.82	69.47	73.46	77.23	77.18	83.21	86.31	88.66	90.06	97.10
Ordnance and accessories.....	53.74	57.20	58.76	64.79	74.12	77.47	77.90	79.00	83.44	91.54	95.47	101.43	105.06
Lumber and wood products.....	47.36	51.38	51.72	55.31	59.98	63.86	65.93	66.18	68.88	70.93	72.04	75.41	79.79
Furniture and fixtures.....	45.64	48.99	49.48	53.67	57.27	61.01	63.14	62.96	67.07	68.95	70.00	70.31	74.44
Stone, clay, and glass products.....	49.07	53.46	54.45	59.20	63.91	66.33	70.35	71.86	77.19	80.56	83.03	84.90	90.83
Primary metal industries.....	55.24	61.03	60.78	67.24	75.12	77.33	84.25	80.88	92.29	96.52	98.75	100.97	112.72
Fabricated metal products.....	52.06	56.08	57.82	63.42	68.81	72.38	77.15	77.33	82.37	85.28	88.94	90.80	97.41
Machinery (except electrical).....	55.89	60.52	60.44	67.21	70.38	79.79	82.91	81.61	87.36	93.26	94.30	94.25	103.25
Electrical machinery.....	50.94	55.30	56.56	60.21	65.25	68.80	71.81	72.44	76.52	80.79	83.01	85.14	89.91
Transportation equipment.....	56.87	61.58	64.95	71.18	75.07	81.14	85.28	86.27	93.44	94.48	97.36	100.69	107.78
Instruments and related products.....	49.17	53.45	55.28	60.81	68.20	72.07	73.69	73.20	77.93	81.01	85.03	87.38	93.25
Miscellaneous manufacturing.....	46.63	50.06	50.23	54.04	57.67	61.50	64.06	64.24	67.40	70.53	72.22	73.26	76.57
Nondurable goods.....	48.96	50.61	51.41	54.71	58.46	60.98	63.00	64.74	68.06	71.10	73.51	75.27	79.60
Food and kindred products.....	48.16	51.11	52.83	55.29	59.02	63.23	66.33	68.47	72.10	75.03	78.17	81.81	85.08
Tobacco manufactures.....	35.01	36.48	37.08	40.77	43.51	44.93	47.57	49.01	51.60	56.02	58.67	62.66	65.40
Textile mill products.....	41.26	45.59	44.53	48.95	51.60	53.18	53.57	52.09	55.74	57.42	58.35	58.29	63.43
Apparel and other finished textile products.....	40.84	42.79	41.89	43.68	46.31	47.58	48.41	48.06	49.41	52.64	53.64	53.45	55.63
Paper and allied products.....	50.21	55.25	55.96	61.14	65.51	68.91	72.67	74.03	78.69	83.03	86.29	88.83	94.16
Printing, publishing, and allied industries.....	61.59	67.64	71.29	73.99	77.21	81.48	85.58	87.17	91.42	93.90	96.25	97.90	103.41
Chemicals and allied products.....	51.13	56.23	58.63	62.67	67.81	70.45	75.58	78.50	82.39	87.14	91.46	94.48	100.02
Products of petroleum and coal.....	60.89	69.23	72.36	75.01	80.98	84.85	90.17	92.62	97.00	104.39	108.59	110.97	117.88
Rubber products.....	55.32	56.78	57.79	64.42	68.61	74.48	77.78	78.21	87.15	87.28	91.53	92.59	101.90
Leather and leather products.....	40.61	41.66	41.61	44.56	46.88	50.69	51.65	50.92	53.44	56.02	57.60	57.78	60.70
In 1947-49 dollars													
Manufacturing.....	\$52.32	\$52.67	\$53.95	\$57.71	\$58.30	\$59.89	\$62.67	\$62.60	\$66.83	\$68.84	\$68.54	\$67.61	\$71.81
Durable goods.....	54.93	55.55	57.00	61.00	62.59	64.72	67.51	67.23	72.67	74.28	73.76	72.92	77.93
Ordnance and accessories.....	56.27	55.64	57.72	63.03	66.77	68.26	68.09	69.34	72.87	78.78	79.43	82.13	84.32
Lumber and wood products.....	49.59	49.98	50.81	53.80	54.04	56.26	57.63	57.65	60.16	61.04	59.93	61.06	64.04
Furniture and fixtures.....	47.79	47.66	48.61	52.21	51.59	53.75	55.19	54.84	58.58	59.34	58.24	56.93	59.74
Stone, clay, and glass products.....	51.38	52.00	53.49	57.59	57.58	58.44	61.49	62.60	67.41	69.33	69.08	68.66	72.90
Primary metal industries.....	57.84	59.37	59.71	65.41	67.68	68.13	73.55	70.45	80.60	83.06	82.15	81.76	90.47
Fabricated metal products.....	54.31	55.14	56.80	61.69	61.99	63.77	67.44	67.36	71.94	73.39	73.99	72.52	78.18
Machinery (except electrical).....	58.32	58.87	59.37	65.38	68.81	70.30	72.47	71.09	76.30	80.26	78.45	76.32	82.67
Electrical machinery.....	53.34	53.79	55.56	58.57	58.78	60.62	62.77	63.10	66.83	69.62	69.06	68.94	72.16
Transportation equipment.....	59.55	59.90	63.80	69.24	68.17	71.49	74.55	75.15	81.61	81.31	81.00	81.53	86.46
Instruments and related products.....	51.49	51.99	54.30	59.15	61.44	63.50	64.41	63.76	68.06	70.58	70.74	70.75	74.84
Miscellaneous manufacturing.....	48.83	48.70	49.34	52.57	51.95	54.19	56.00	55.96	58.86	60.70	60.08	59.32	61.45
Nondurable goods.....	49.17	49.23	50.50	53.22	52.67	53.73	55.59	56.39	59.44	61.19	61.16	60.95	63.88
Food and kindred products.....	50.43	49.72	51.90	53.78	53.98	55.71	57.98	59.64	62.97	64.51	65.03	65.24	68.76
Tobacco manufactures.....	36.66	35.49	36.42	39.66	39.20	39.59	41.41	42.69	45.07	48.21	48.81	50.66	52.49
Textile mill products.....	43.20	44.35	44.04	47.62	46.49	46.85	46.83	45.37	48.68	49.54	48.54	47.20	50.91
Apparel and other finished textile products.....	42.76	41.62	41.15	42.49	41.72	41.92	42.32	41.86	43.15	45.30	44.63	43.28	44.65
Paper and allied products.....	52.58	53.75	54.97	59.47	59.02	60.71	63.52	64.49	68.72	71.45	71.79	71.93	75.57
Printing, publishing, and allied industries.....	64.49	65.80	70.03	71.97	69.56	71.79	74.81	75.93	79.84	80.81	80.07	79.27	82.99
Chemicals and allied products.....	53.54	54.70	57.59	60.96	61.09	62.07	66.07	68.38	71.96	74.99	76.09	78.50	80.27
Products of petroleum and coal.....	63.76	67.34	71.08	72.97	72.95	74.76	78.82	80.68	84.72	89.84	90.17	89.85	94.21
Rubber products.....	57.93	55.23	56.77	62.67	61.81	65.62	67.99	68.13	76.11	75.07	76.15	74.97	81.54
Leather and leather products.....	42.52	40.53	40.87	43.35	42.22	44.06	45.15	44.36	46.67	48.21	47.92	46.79	48.72

\* New series; not comparable with data before 1951.

\* New series; not comparable with data before 1956.

The more effective control of prices during the second war prevented most of the attrition which occurred previously in the buying power of the increased money earnings. However, workers' real earnings tend to be less a measure of current levels of living during wartime than in most other periods because many purchases must be deferred.

The rise in workers' average earnings during both wars was also partly the consequence of a change in industry composition. Industries where earnings were appreciably higher than the average for all manufacturing expanded their employment

by a much larger proportion than did the lower wage industries.

After declining briefly because of rapid price increases during the readjustment period following World War II, the weekly earnings of factory production workers again pushed quickly upward, although the dramatic increases of World War II were not duplicated. Between 1947 and 1959, earnings increased about 80 percent in money terms (an annual rate of 5.0 percent) and about 40 percent in real terms (an annual rate of 2.7 percent).

This rate of growth in factory workers' real earnings since 1947 has been twice that of the period following World War I and not much lower than the World War I rate itself, as shown in the following tabulation:

	Average annual percent change		
	Average gross weekly earnings	Consumer price index	Average real weekly earnings
1914 to 1919 (World War I).....	14.9	11.5	3.1
1919 to 1929.....	1.3	-1.1	1.3
1929 to 1939.....	-0.5	-2.1	1.6
1939 to 1945 (World War II).....	10.9	4.4	6.2
1945 to 1947.....	6.1	11.5	-4.8
1947 to 1959.....	5.0	2.2	2.7
1914 to 1959.....	4.8	2.4	2.3

### Cyclical Fluctuations and Workers' Earnings

According to the classical economic model, prices, wages, and hours of work each decrease during a period of business contraction—with

lower prices acting to offset somewhat the decline in earnings. However, the three recessions<sup>3</sup> during the postwar period have not conformed in one or more major respects to the classical model. The first recession (1948-49) probably came nearest to doing so; prices and hours of work both dropped although average straight-time earnings continued to rise during the early months of the recession, dipping only slightly near the end of 1949 as a result of employment declines in the higher paying industries. Real weekly earnings dropped by a small amount (about 3 percent) in the spring of 1949 (partly a seasonal effect) after having risen continuously during the early months of the recession (charts 1 and 2).

The second postwar recession (1953-54) deviated even more from the classical pattern. The

<sup>3</sup> The commonly accepted peaks and troughs of the 3 postwar recessions are November 1948 and October 1949; July 1953 and August 1954; July 1957 and April 1958. However, a downturn in employment occurred earlier in manufacturing than in the total economy in the first and third recessions, and in this discussion, July 1948 and December 1956 are used as the peak periods.

**Chart 2. Average Straight-Time Hourly Earnings of Factory Production Workers, January 1947-May 1960**

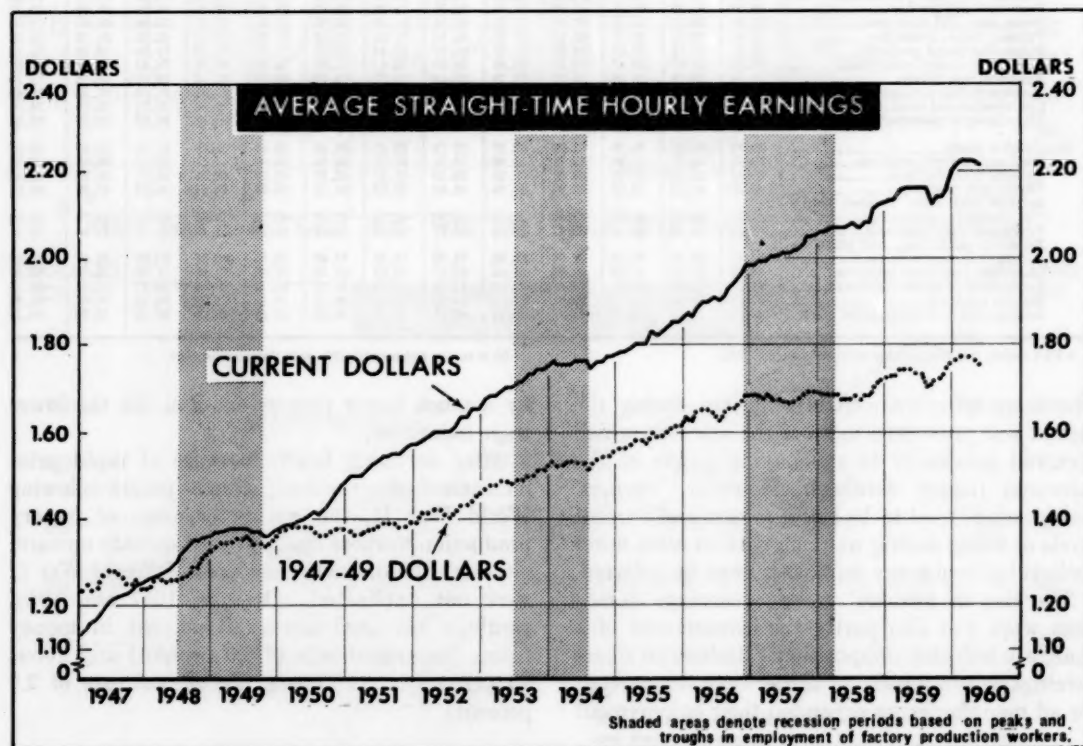




TABLE 2. GROSS AVERAGE HOURLY EARNINGS OF FACTORY PRODUCTION WORKERS, BY MAJOR INDUSTRY GROUP, 1947-59

Major industry group	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
In current dollars													
Manufacturing.....	\$1.24	\$1.35	\$1.40	\$1.47	\$1.50	\$1.67	\$1.77	\$1.81	\$1.88	\$1.98	\$2.07	\$2.13	\$2.22
Durable goods.....	1.29	1.41	1.47	1.54	1.67	1.77	1.87	1.92	2.01	2.10	2.20	2.28	2.38
Ordnance and accessories.....	1.30	1.38	1.47	1.55	1.70	1.81	1.90	1.98	2.05	2.19	2.34	2.48	2.55
Lumber and wood products.....	1.13	1.24	1.27	1.35	1.47	1.55	1.62	1.63	1.68	1.76	1.81	1.89	1.97
Furniture and fixtures.....	1.10	1.19	1.23	1.28	1.39	1.47	1.54	1.57	1.62	1.69	1.75	1.78	1.82
Stone, clay, and glass products.....	1.19	1.31	1.37	1.44	1.54	1.61	1.72	1.77	1.86	1.96	2.05	2.12	2.21
Primary metal industries.....	1.39	1.52	1.59	1.65	1.81	1.90	2.06	2.09	2.24	2.36	2.50	2.65	2.79
Fabricated metal products.....	1.28	1.40	1.46	1.53	1.65	1.74	1.85	1.90	1.98	2.07	2.18	2.27	2.37
Machinery (except electrical).....	1.35	1.47	1.53	1.61	1.76	1.86	1.96	2.01	2.09	2.21	2.30	2.38	2.50
Electrical machinery.....	1.26	1.38	1.43	1.47	1.58	1.67	1.76	1.82	1.88	1.96	2.07	2.15	2.22
Transportation equipment.....	1.45	1.58	1.66	1.74	1.85	1.96	2.07	2.13	2.23	2.31	2.41	2.53	2.66
Instruments and related products.....	1.22	1.33	1.40	1.48	1.62	1.72	1.78	1.83	1.91	2.01	2.11	2.19	2.28
Miscellaneous manufacturing.....	1.14	1.22	1.26	1.32	1.41	1.50	1.57	1.61	1.66	1.75	1.81	1.85	1.90
Nondurable goods.....	1.17	1.28	1.33	1.38	1.48	1.54	1.61	1.66	1.71	1.80	1.88	1.94	2.01
Food and kindred products.....	1.12	1.21	1.27	1.33	1.43	1.52	1.61	1.67	1.75	1.83	1.93	2.01	2.10
Tobacco manufactures.....	.90	.95	.99	1.07	1.13	1.17	1.24	1.30	1.33	1.44	1.52	1.60	1.66
Textile mill products.....	1.04	1.16	1.19	1.24	1.33	1.36	1.37	1.36	1.39	1.45	1.50	1.51	1.57
Apparel and other finished textile products.....	1.13	1.18	1.17	1.20	1.29	1.30	1.33	1.35	1.35	1.45	1.49	1.51	1.52
Paper and allied products.....	1.17	1.29	1.34	1.41	1.52	1.61	1.69	1.75	1.83	1.94	2.04	2.12	2.20
Printing, publishing, and allied industries.....	1.54	1.72	1.84	1.91	1.99	2.10	2.20	2.27	2.35	2.42	2.50	2.59	2.70
Chemicals and allied products.....	1.23	1.36	1.43	1.51	1.63	1.71	1.83	1.91	1.99	2.11	2.22	2.31	2.41
Products of petroleum and coal.....	1.50	1.70	1.79	1.83	1.98	2.09	2.21	2.27	2.36	2.54	2.65	2.74	2.87
Rubber products.....	1.39	1.46	1.51	1.58	1.69	1.83	1.93	1.97	2.09	2.17	2.26	2.35	2.46
Leather and leather products.....	1.05	1.12	1.14	1.19	1.27	1.32	1.37	1.38	1.41	1.49	1.54	1.57	1.61
In 1947-49 dollars													
Manufacturing.....	\$1.30	\$1.31	\$1.38	\$1.43	\$1.43	\$1.47	\$1.55	\$1.58	\$1.64	\$1.70	\$1.72	\$1.72	\$1.78
Durable goods.....	1.35	1.37	1.44	1.50	1.50	1.56	1.63	1.67	1.76	1.81	1.83	1.85	1.91
Ordnance and accessories.....	1.36	1.34	1.44	1.51	1.53	1.59	1.66	1.72	1.79	1.88	1.95	2.01	2.06
Lumber and wood products.....	1.18	1.21	1.25	1.31	1.32	1.37	1.42	1.42	1.47	1.51	1.51	1.53	1.58
Furniture and fixtures.....	1.15	1.16	1.21	1.25	1.25	1.30	1.35	1.37	1.41	1.45	1.46	1.44	1.46
Stone, clay, and glass products.....	1.23	1.27	1.35	1.40	1.39	1.42	1.50	1.54	1.62	1.69	1.71	1.72	1.77
Primary metal industries.....	1.46	1.48	1.56	1.61	1.63	1.67	1.80	1.82	1.96	2.03	2.08	2.15	2.24
Fabricated metal products.....	1.34	1.36	1.43	1.49	1.49	1.53	1.62	1.66	1.73	1.78	1.81	1.84	1.90
Machinery (except electrical).....	1.41	1.43	1.50	1.57	1.59	1.64	1.71	1.75	1.83	1.90	1.91	1.93	2.01
Electrical machinery.....	1.32	1.34	1.40	1.43	1.42	1.47	1.54	1.59	1.64	1.70	1.72	1.74	1.78
Transportation equipment.....	1.52	1.54	1.63	1.69	1.67	1.73	1.81	1.86	1.95	1.99	2.00	2.06	2.13
Instruments and related products.....	1.28	1.29	1.38	1.44	1.46	1.52	1.56	1.59	1.67	1.73	1.76	1.77	1.83
Miscellaneous manufacturing.....	1.19	1.19	1.24	1.28	1.27	1.32	1.37	1.40	1.45	1.51	1.51	1.50	1.52
Nondurable goods.....	1.23	1.25	1.31	1.34	1.33	1.36	1.41	1.45	1.49	1.55	1.56	1.57	1.61
Food and kindred products.....	1.17	1.18	1.25	1.29	1.29	1.34	1.41	1.45	1.53	1.57	1.61	1.63	1.69
Tobacco manufactures.....	.94	.92	.97	1.04	1.02	1.03	1.08	1.13	1.16	1.24	1.26	1.30	1.33
Textile mill products.....	1.00	1.13	1.17	1.21	1.20	1.20	1.20	1.18	1.21	1.25	1.25	1.22	1.26
Apparel and other finished textile products.....	1.18	1.15	1.15	1.17	1.16	1.15	1.16	1.18	1.18	1.25	1.24	1.22	1.22
Paper and allied products.....	1.23	1.25	1.32	1.37	1.37	1.42	1.48	1.52	1.60	1.67	1.70	1.72	1.77
Printing, publishing, and allied industries.....	1.61	1.67	1.81	1.86	1.79	1.85	1.92	1.98	2.05	2.08	2.08	2.10	2.17
Chemicals and allied products.....	1.29	1.32	1.40	1.47	1.47	1.51	1.60	1.66	1.74	1.82	1.85	1.87	1.93
Products of petroleum and coal.....	1.57	1.65	1.76	1.78	1.78	1.84	1.93	1.96	2.06	2.19	2.20	2.22	2.30
Rubber products.....	1.46	1.42	1.48	1.54	1.52	1.61	1.69	1.72	1.83	1.87	1.88	1.90	1.97
Leather and leather products.....	1.10	1.09	1.12	1.16	1.14	1.16	1.20	1.20	1.23	1.28	1.28	1.27	1.29

<sup>1</sup> New series; not comparable with data before 1951.<sup>2</sup> New series; not comparable with data before 1956.

movement in average straight-time earnings was similar to that in the first recession; earnings rose during the first few months after employment cuts had begun and only leveled off during the remainder of the recession. However, rather than falling, prices remained stationary. The net effect on the employed factory worker, resulting from working somewhat fewer hours, was a small decrease in real earnings during the first half of 1954.

The recession of 1957-58 was the most severe in both employment losses and shortened workweeks. However, there was no letup in the ad-

vance of wage rates, and no lowering of prices. Instead, prices rose enough to cause real straight-time hourly earnings to level off. In addition, because of the large decline in hours (mostly overtime hours) real weekly earnings decreased substantially.

One of the factors exerting an upward push on hourly earnings—even during recessions—has been the institution of automatic wage increases. These automatic increases have been a byproduct of the incorporation of improvement-factor increases and price escalation clauses into long-term labor-management agreements designed to maintain

TABLE 3. AVERAGE WEEKLY OVERTIME EARNINGS AND OVERTIME EARNINGS AS A PERCENT OF GROSS EARNINGS OF FACTORY PRODUCTION WORKERS, BY MAJOR INDUSTRY GROUP, 1956-59

Major industry group	Average weekly overtime earnings								Overtime as a percent of gross earnings			
	In current dollars				In 1947-49 dollars							
	1956	1957	1958	1959	1956	1957	1958	1959	1956	1957	1958	1959
Manufacturing.....	\$8.02	\$7.24	\$6.24	\$5.71	\$6.90	\$6.02	\$5.05	\$6.99	10.0	8.8	7.5	9.7
Durable goods.....	9.14	7.70	6.36	5.32	7.87	6.41	5.15	7.48	10.6	8.7	7.1	9.6
Ordnance and accessories.....	9.22	6.84	7.26	7.84	7.93	5.69	5.88	6.29	10.1	7.2	7.2	7.5
Lumber and wood products.....	8.37	7.35	7.92	9.64	7.20	6.11	6.41	7.74	11.5	10.2	10.5	12.1
Furniture and fixtures.....	6.89	5.87	5.45	7.66	5.93	4.88	4.41	6.15	10.0	8.4	7.8	10.3
Stone, clay, and glass products.....	10.15	9.21	8.59	10.86	8.73	7.66	6.96	8.72	12.6	11.1	10.1	12.0
Primary metal industries.....	9.62	7.32	5.09	10.53	8.28	6.09	4.12	8.45	10.0	7.4	5.0	9.3
Fabricated metal products.....	9.00	8.86	6.96	9.96	7.75	7.37	5.64	7.99	10.6	10.0	7.7	10.2
Machinery (except electrical).....	11.77	8.70	5.94	9.80	10.13	7.24	4.81	7.87	12.6	9.2	6.3	9.5
Electrical machinery.....	7.49	5.76	4.75	7.13	6.45	4.79	3.85	5.72	9.3	6.9	5.6	7.9
Transportation equipment.....	9.70	8.46	7.04	9.68	8.35	7.04	5.70	7.77	10.3	8.7	7.0	9.0
Instruments and related products.....	6.76	6.18	5.84	7.66	5.82	5.14	3.92	6.15	8.2	7.3	5.5	8.2
Miscellaneous manufacturing.....	6.59	6.07	5.67	7.18	5.67	5.05	4.59	5.76	9.3	8.4	7.7	9.4
Nondurable goods.....	6.56	6.59	6.24	7.86	5.65	5.48	5.05	6.31	9.2	9.0	8.3	9.9
Food and kindred products.....	8.71	8.65	8.73	10.00	7.50	7.20	7.07	8.03	11.6	11.1	10.7	11.7
Tobacco manufactures.....	2.34	2.70	3.06	2.95	2.01	2.25	2.48	2.37	4.2	4.6	4.9	4.5
Textile mill products.....	5.46	4.82	4.63	7.07	4.70	4.01	3.75	5.67	9.5	8.3	7.9	11.1
Apparel and other finished textile products.....	2.57	2.43	2.46	3.13	2.21	2.02	1.99	2.51	4.9	4.5	4.6	5.6
Paper and allied products.....	12.70	12.51	11.82	14.42	10.93	10.41	9.57	11.57	15.3	14.5	13.3	15.3
Chemicals and allied products.....	7.07	7.13	6.78	8.78	6.08	5.93	5.49	7.05	8.1	7.8	7.2	8.8
Products of petroleum and coal.....	7.41	7.38	6.05	7.59	6.38	6.14	4.90	6.09	7.1	6.8	5.5	6.5
Rubber products.....	8.78	9.16	7.87	13.10	7.56	7.62	6.37	10.51	10.1	10.0	8.5	12.9
Leather and leather products.....	3.09	2.96	2.56	3.32	2.66	2.46	2.07	2.66	5.5	5.1	4.4	5.5

stability in industrial relations. And the growth in collective power of workers through their unions<sup>4</sup> has in itself served to limit the frequency and extent of wage cuts by employers during a business recession.

### The Postwar Movement of Earnings

The increase in factory workers' weekly earnings during the postwar period as a whole appears to have been entirely a consequence of a rise in straight-time hourly earnings; there was no discernible trend in the length of the workweek (that is, in hours paid for).<sup>5</sup> Except for temporary changes, the increase in straight-time hourly earnings appears to reflect underlying increases in wage rates rather than changes in the industry composition of employment.

Average straight-time earnings during the postwar period increased at a fairly steady rate, except for temporary stability during the latter phases of the first two recessions. This stability resulted partially from substantial decreases in the relative importance of employment in higher wage industries (metals, machinery, transportation equipment, chemicals, petroleum, and rubber).

Other relatively minor interruptions to the steady upward advance in hourly earnings were also the result of temporary changes in employment rather than of reductions in wage rates.

For example, during the major postwar disputes in the steel industry in 1949, 1952, 1956, and 1959, average hourly earnings for all manufacturing either leveled off or actually declined because of the absence from the payroll of steelworkers, whose earnings exceed the average for all manufacturing.

**Industry Differences.** The statistics on earnings for manufacturing industries, and for the major sectors of durable and nondurable goods, lead to two principal conclusions: (1) Workers' earnings vary widely between industries (more than 100 percent between highest and lowest paid industries).<sup>6</sup> (2) These variations have tended to grow progressively larger in the postwar period, particularly between 1947 and 1952 (chart 3).

Earnings of workers in the durable goods sector have regularly been higher than those in nondurable goods, and the gap has grown larger. In 1947, the average earnings of workers in durable goods industries were \$52.46 a week, which was \$5.50, or 12 percent, higher than in nondurable goods (table 1). In 1959, durable goods workers

<sup>4</sup> In 1933, unions reported a membership of less than 3 million; in 1958, the number was 17 million; the proportion of nonfarm workers in unions went from 11.5 to 33.7 percent in that period.

<sup>5</sup> Joseph S. Zeisel, *The Workweek in American Industry, 1850-1956* (in *Monthly Labor Review*, January 1958, p. 27).

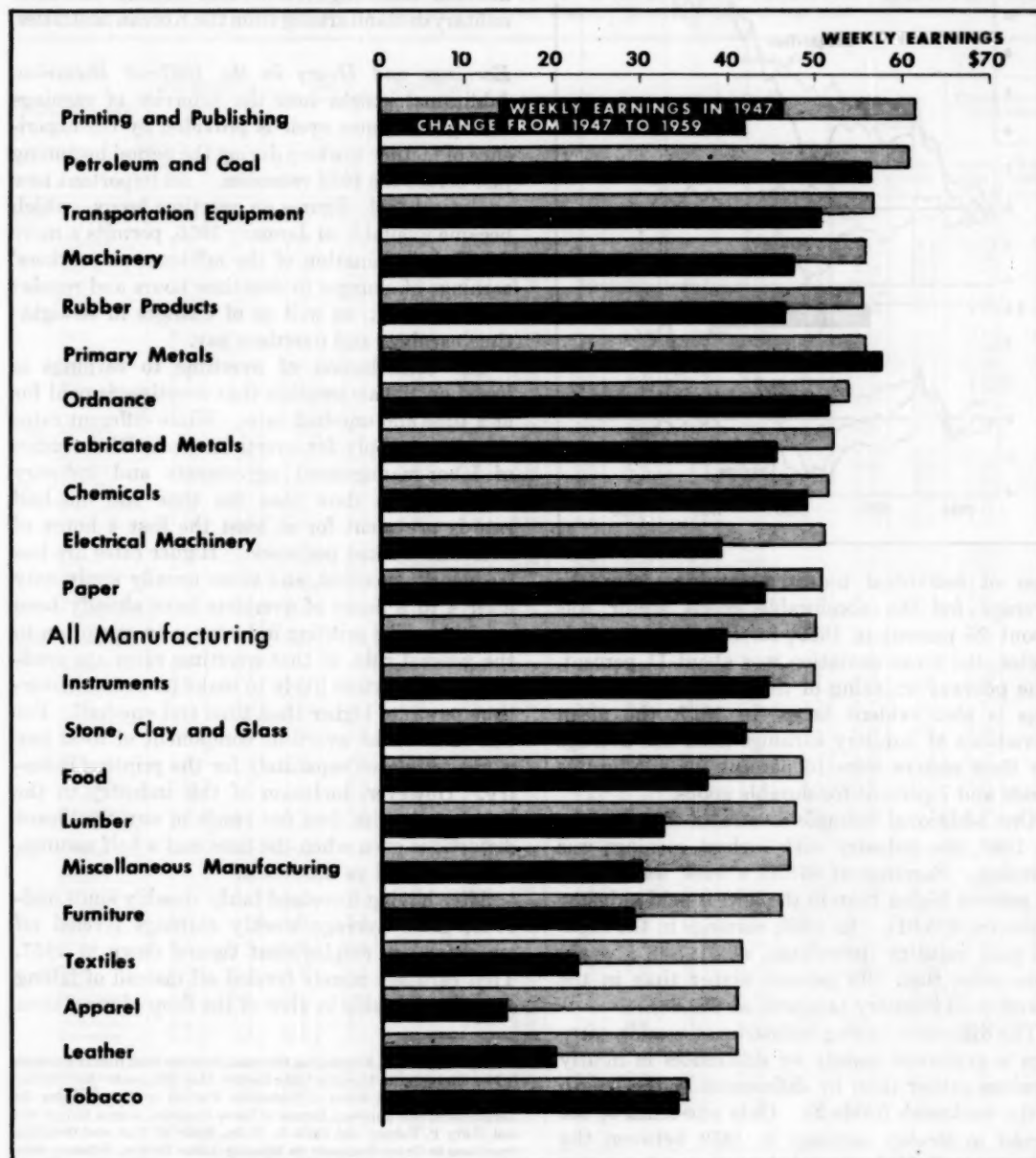
<sup>6</sup> References to industries apply to the 21 major industry groups in manufacturing.

received \$97.10 a week, which was \$17.50, or 22 percent, higher than in nondurable goods.

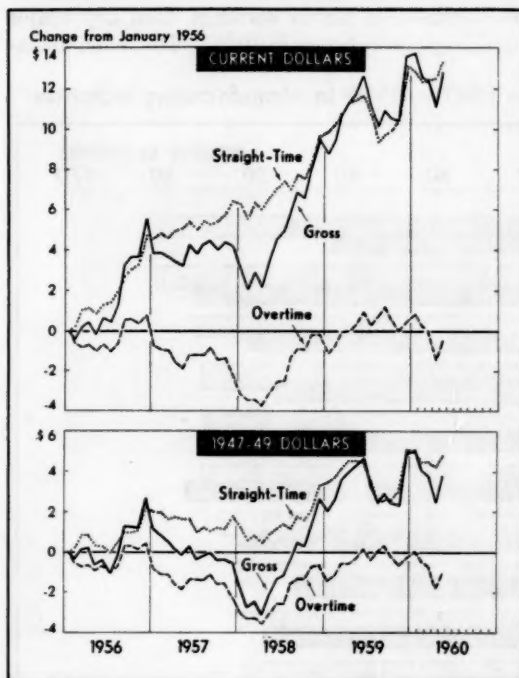
Although average earnings are higher in the durable goods sector, the variations among individual industries are much greater in the non-

durable goods sector; four of the eight manufacturing industries with the highest earnings are in the nondurable goods sector and one of these—petroleum—had higher earnings than any major durable goods industry in 1959. The mean devia-

**Chart 3. Changes in Gross Weekly Earnings From 1947 to 1959 in Manufacturing Industries**



**Chart 4. Changes in Straight-Time and Overtime Weekly Earnings of Factory Production Workers From January 1956 to May 1960**



tion of individual industry earnings from the average for the nondurable goods sector was about 25 percent in 1959; for the durable goods sector, the mean deviation was about 11 percent. The postwar widening of the differences in earnings is also evident here. In 1947, the mean deviations of industry earnings from the average for their sectors were 16 percent for nondurable goods and 7 percent for durable goods.

One additional example illustrates these points. In 1947, the industry with highest earnings was printing. Earnings of \$61.59 a week were about 75 percent higher than in the lowest paid industry (tobacco, \$35.01). In 1959, earnings in the highest paid industry (petroleum, at \$117.38 a week) were more than 100 percent higher than in the lowest paid industry (apparel, at \$55.63).

The difference among industries in weekly earnings is explained mainly by differences in hourly earnings rather than by differences in the length of the workweek (table 2). Only one-tenth of the spread in weekly earnings in 1959 between the industries of highest and lowest earnings was

accounted for by differences in the length of the workweek.

Most of the postwar widening of the spread in earnings between manufacturing industries took place from 1947 to 1952 when manufacturing industries were filling the huge, pent-up consumer demand following World War II and the later military demand arising from the Korean hostilities.

*Earnings and Hours in the 1957-58 Recession.* Additional insight into the behavior of earnings during a business cycle is provided by the experience of factory workers during the period beginning just before the 1958 recession. An important new analytical tool—figures on overtime hours—which became available in January 1956, permits a more detailed examination of the influence on workers' earnings of changes in overtime hours and regular hours of work, as well as of changes in straight-time earnings and overtime pay.

The contribution of overtime to earnings is based on the assumption that overtime is paid for at a time and one-half rate. While different rates sometimes apply for overtime work, BLS studies of labor-management agreements and industry wage surveys show that the time and one-half rate is prevalent for at least the first 4 hours of overtime worked per week. Higher rates are less frequently specified, and these usually apply only after 4 to 8 hours of overtime have already been worked. The printing industry is an exception to the general rule, in that overtime rates are graduated to an extent likely to make its average overtime pay rate higher than time and one-half. For this reason, the overtime component of total pay is not estimated separately for the printing industry. However, inclusion of this industry in the larger categories does not result in any significant distortions even when the time and a half assumption is applied to the totals.<sup>7</sup>

After having increased fairly steadily since mid-1945, gross average weekly earnings leveled off when factory employment turned down in 1957. That earnings merely leveled off instead of falling seems remarkable in view of the drop of more than

<sup>7</sup> Samuel E. Cohen, *Eliminating Premium Overtime from Hourly Earnings in Manufacturing* (in *Monthly Labor Review*, May 1956, pp. 537-538); Shirley Grossman, *Overtime Hours of Production Workers in Manufacturing* (in *Employment and Earnings*, Bureau of Labor Statistics, August 1957, p. vi); and Harry P. Cohany and Dena G. Weiss, *Hours of Work and Overtime Provisions in Union Contracts* (in *Monthly Labor Review*, February 1958, pp. 133-141).



1½ hours in paid working time, most of it overtime work at premium pay. However, rising wage rates provided the offset to shorter hours.

Real earnings did decline in 1957 as a result of continued increases in prices. And as employ-

ment reached its recession trough in the spring of 1958, money earnings also declined with the further sharp drops in the workweek. For the recession period as a whole in manufacturing (December 1956 to April 1958), average weekly earn-

TABLE 4. AVERAGE WEEKLY OVERTIME EARNINGS AND PERCENT OF GROSS WEEKLY EARNINGS OF FACTORY PRODUCTION WORKERS, BY MAJOR INDUSTRY GROUP, JANUARY 1956-JUNE 1960

Year and month	Manufacturing		Total: Durable goods		Total: Nondurable goods		Durable goods									
							Ordnance and accessories		Lumber and wood products		Furniture and fixtures		Stone, clay, and glass products		Primary metal industries	
	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent
1956: Average.....	\$8.02	10.0	\$9.14	10.6	\$6.36	9.2	\$9.22	10.1	\$8.37	11.8	\$6.89	10.0	\$10.15	12.6	\$9.62	10.0
January.....	8.42	10.7	9.21	10.9	6.89	9.9	8.00	9.1	8.59	12.8	7.39	10.7	9.66	12.4	11.76	12.0
February.....	7.81	10.0	8.91	10.6	6.38	9.2	7.73	8.5	8.59	12.9	7.20	10.6	9.61	12.3	9.41	9.9
March.....	7.61	9.7	8.66	10.3	6.49	9.2	8.74	9.8	7.87	11.6	6.80	9.9	9.66	12.3	9.41	9.9
April.....	7.70	9.7	8.70	10.2	6.26	8.9	8.78	9.7	8.11	11.6	6.11	9.1	10.04	12.6	9.45	9.9
May.....	7.41	9.5	8.44	9.9	6.04	8.6	8.82	9.7	7.95	11.1	5.87	8.8	10.32	12.8	9.49	9.9
June.....	7.74	9.8	8.79	10.3	6.30	8.9	8.63	9.4	9.14	12.5	6.15	9.0	10.15	12.5	9.83	10.3
July.....	7.41	9.4	8.44	10.0	6.60	9.2	9.27	10.1	8.56	11.8	5.87	8.7	10.49	13.0	9.57	10.4
August.....	7.74	9.7	8.83	10.3	6.56	9.2	8.31	9.2	9.34	12.4	7.18	10.7	10.21	12.5	7.94	8.5
September.....	8.97	11.0	10.30	11.5	7.39	10.2	11.24	12.0	9.40	12.7	7.97	11.2	10.26	12.6	10.88	10.9
October.....	9.02	11.0	10.20	11.5	7.17	9.9	11.02	11.6	8.30	11.4	7.97	11.1	10.31	12.5	8.81	8.9
November.....	8.82	10.7	10.30	11.6	7.21	9.9	10.09	10.7	7.44	10.5	6.76	9.7	10.42	12.6	9.20	9.3
December.....	9.21	11.0	10.71	11.8	7.02	9.6	11.12	11.5	7.56	10.9	7.52	10.5	9.99	11.9	9.00	9.5
1957: Average.....	7.24	8.8	7.70	8.7	6.59	9.0	6.84	7.2	7.35	10.2	5.87	8.4	9.21	11.1	7.32	7.4
January.....	7.72	9.4	9.14	10.3	6.24	8.6	8.95	9.3	6.72	10.0	5.76	8.4	8.48	10.4	10.40	10.3
February.....	7.46	9.1	8.55	9.6	6.24	8.6	8.99	9.3	6.80	9.9	5.54	8.0	8.48	10.3	7.89	8.0
March.....	7.46	9.1	8.23	9.3	6.24	8.5	8.70	9.1	6.67	9.5	5.58	8.0	8.78	10.7	7.20	7.3
April.....	6.90	8.4	7.63	8.6	6.01	8.3	8.06	8.4	6.79	9.4	5.07	7.4	8.48	10.4	7.20	7.4
May.....	6.60	8.1	7.00	8.0	6.07	8.3	7.09	7.5	7.39	10.1	4.85	7.1	9.07	11.0	6.48	6.7
June.....	7.24	8.7	7.67	8.6	6.59	8.9	6.84	7.2	8.23	11.0	5.87	8.4	9.70	11.7	7.95	8.0
July.....	7.24	8.8	7.38	8.4	6.86	9.2	5.50	5.9	7.66	10.7	5.61	8.2	9.75	11.8	7.75	7.7
August.....	7.24	8.7	7.38	8.3	6.83	9.2	5.50	5.9	8.50	11.2	6.03	9.3	9.80	11.7	6.70	6.7
September.....	7.58	9.1	8.10	9.1	7.14	9.5	5.57	5.9	8.23	11.5	6.93	9.6	10.20	12.0	7.88	7.8
October.....	7.00	8.5	7.49	8.4	6.62	8.9	4.23	4.5	7.74	10.5	6.67	9.3	9.65	11.4	6.00	6.1
November.....	7.07	8.5	7.19	8.1	6.70	9.0	4.60	4.8	7.21	10.0	5.64	8.1	9.14	10.8	5.25	5.4
December.....	6.15	7.4	6.24	7.0	6.14	8.2	6.04	6.1	6.08	9.4	5.93	8.4	8.22	9.8	4.52	4.7
1958: Average.....	6.24	7.5	6.36	7.1	6.24	8.3	7.26	7.2	7.92	10.5	5.45	7.8	8.59	10.1	5.09	5.0
January.....	5.25	6.4	5.28	6.1	5.36	7.3	7.14	4.1	6.04	8.7	4.13	6.1	7.34	8.9	4.54	4.8
February.....	4.94	6.1	4.95	5.7	5.33	7.3	6.78	6.8	5.84	8.3	3.89	5.7	6.73	8.3	3.80	4.0
March.....	4.97	6.1	4.97	5.7	5.36	7.3	6.81	6.8	6.37	9.0	3.92	5.7	7.00	8.6	3.43	3.6
April.....	4.66	5.8	4.64	5.3	4.82	6.6	6.84	6.8	5.91	8.3	3.39	5.0	6.70	8.2	3.81	4.0
May.....	5.28	6.4	4.97	5.6	5.39	7.3	6.51	6.5	7.10	9.5	3.39	5.1	7.88	9.5	3.44	3.6
June.....	5.90	7.1	5.66	6.3	5.95	7.9	5.83	5.8	7.87	10.3	4.44	6.4	8.53	10.1	5.01	5.0
July.....	5.93	7.1	6.02	6.7	6.24	8.2	6.90	6.8	7.41	10.0	4.93	7.2	9.18	10.9	5.15	5.0
August.....	7.14	8.5	7.02	7.7	6.77	8.9	7.62	7.6	9.61	12.4	6.75	9.4	9.84	11.3	5.57	5.4
September.....	7.49	8.8	7.73	8.4	7.37	9.6	8.75	8.5	10.32	12.9	7.79	10.6	10.56	11.9	6.81	6.4
October.....	7.49	8.8	8.03	8.7	7.09	9.2	8.05	7.8	10.10	12.6	7.79	10.6	10.05	11.6	6.43	6.0
November.....	8.23	9.5	8.81	9.3	7.13	9.2	8.42	8.2	9.44	12.2	7.01	9.6	10.20	11.7	7.26	6.7
December.....	8.27	9.4	9.23	9.6	7.45	9.6	8.18	7.7	8.37	10.8	8.04	10.8	9.36	10.7	8.04	7.3
1959: Average.....	8.71	9.7	9.32	9.6	7.86	9.9	7.84	7.5	9.64	12.1	7.96	10.3	10.86	12.0	10.53	9.3
January.....	7.35	8.4	7.90	8.3	6.91	8.9	7.78	7.4	7.96	10.6	6.79	9.4	8.78	10.1	8.51	7.7
February.....	7.67	8.7	8.24	8.7	6.91	8.9	6.67	6.4	8.15	11.0	6.53	9.0	9.14	10.4	9.35	8.3
March.....	8.39	9.4	9.01	9.3	7.53	9.5	7.38	7.1	9.11	11.7	6.83	9.3	10.18	11.3	10.24	8.9
April.....	8.42	9.4	9.01	9.2	7.28	9.2	7.01	6.8	9.26	11.7	6.07	8.4	11.13	12.2	11.10	9.5
May.....	8.75	9.7	9.74	9.9	7.57	9.5	7.84	7.4	10.43	12.9	6.84	8.7	12.08	13.1	11.92	10.1
June.....	9.40	10.3	10.44	10.5	7.86	9.9	8.22	7.8	10.55	12.8	7.21	9.7	11.45	12.4	12.74	10.8
July.....	8.75	9.8	9.36	9.7	8.19	10.2	7.84	7.5	9.92	12.4	7.43	10.0	11.50	12.5	9.83	9.1
August.....	9.22	10.4	10.22	10.7	8.40	10.5	7.81	7.6	11.75	14.2	8.71	11.4	12.40	13.4	9.95	9.5
September.....	9.63	10.8	10.26	10.6	8.78	10.9	8.59	8.2	10.48	12.7	8.45	11.2	11.56	12.6	11.52	10.8
October.....	8.99	10.1	9.58	9.9	8.19	10.3	7.94	7.5	10.19	12.4	9.24	12.1	10.91	11.9	10.02	9.5
November.....	8.42	9.5	8.66	9.1	7.94	9.9	7.97	7.5	9.31	11.6	8.45	11.2	10.37	11.3	9.32	8.6
December.....	8.91	9.7	9.52	9.5	7.98	9.8	8.38	7.7	8.64	10.7	9.35	12.1	9.77	10.6	10.80	9.2
1960: January.....	9.28	10.1	10.31	10.2	7.72	9.6	8.03	7.4	8.22	10.7	7.25	9.7	9.48	10.4	11.68	9.9
February.....	8.62	9.5	9.60	9.7	7.46	9.3	8.80	8.2	8.02	10.3	6.98	9.4	9.16	10.1	9.97	8.7
March.....	8.33	9.2	8.93	9.0	7.20	9.0	7.68	7.1	8.11	10.5	6.52	9.0	8.91	9.8	8.73	7.6
April.....	6.99	7.8	7.47	7.7	6.63	8.3	6.53	6.1	8.73	10.9	6.48	8.8	9.20	10.1	7.11	6.3
May.....	7.99	8.7	8.53	8.7	7.54	9.3	7.27	6.7	9.95	12.1	6.48	8.7	10.18	11.0	6.23	5.7
June.....	7.99	8.7	8.53	8.7	7.58	9.2										

NOTE: Data for the two most recent months are preliminary.

TABLE 4. AVERAGE WEEKLY OVERTIME EARNINGS AND PERCENT OF GROSS WEEKLY EARNINGS OF FACTORY PRODUCTION WORKERS, BY MAJOR INDUSTRY GROUP, JANUARY 1956-JUNE 1960—Continued

Year and month	Durable goods—Continued												Nondurable goods			
	Fabricated metal products		Machinery (except electrical)		Electrical machinery		Transportation equipment		Instruments and related products		Miscellaneous manufacturing industries		Food and kindred products		Tobacco manufactures	
	Earnings	Percent	Earnings	Percent	Earnings	Percent	Earnings	Percent	Earnings	Percent	Earnings	Percent	Earnings	Percent	Earnings	Percent
1956: Average.....	\$9.00	10.6	\$11.77	12.6	\$7.49	9.3	\$9.70	10.3	\$6.76	8.2	\$6.59	9.3	\$8.71	11.6	\$2.34	4.2
January.....	8.48	10.3	12.42	13.4	7.81	9.9	7.85	8.6	6.59	8.2	6.72	9.7	9.14	12.2	2.48	4.6
February.....	8.45	10.2	12.17	13.2	7.01	8.9	7.52	8.4	6.59	8.2	6.72	9.7	7.57	10.3	1.45	2.8
March.....	8.53	10.3	11.86	12.9	6.49	8.3	7.52	8.3	6.91	8.6	6.30	9.0	7.70	10.4	1.75	3.1
April.....	8.27	9.9	11.91	12.8	7.41	9.2	7.59	8.3	7.24	8.9	6.34	9.0	7.43	10.1	1.98	3.5
May.....	7.98	9.6	11.60	12.6	7.13	8.9	6.96	7.8	6.98	8.6	6.34	9.1	7.92	10.7	2.44	4.2
June.....	8.66	10.3	11.34	12.3	6.88	8.6	7.33	8.1	6.44	7.9	5.83	8.4	9.24	12.3	2.91	4.9
July.....	8.06	9.7	10.76	11.7	5.79	7.3	8.36	8.9	6.50	7.9	5.58	8.1	8.98	12.0	2.46	4.2
August.....	8.70	10.3	11.13	12.1	7.29	9.0	9.07	9.6	6.80	8.3	6.55	9.4	8.56	11.5	2.10	3.8
September.....	10.66	12.1	12.26	12.9	8.44	10.2	11.24	11.5	7.46	8.9	7.14	10.1	10.12	13.3	2.65	4.7
October.....	11.02	12.3	11.99	12.7	9.07	10.9	12.60	12.7	7.16	8.5	7.95	11.1	9.50	12.5	2.06	3.8
November.....	10.10	11.5	11.07	11.8	8.53	10.2	14.98	14.9	6.90	8.2	7.18	10.1	10.05	12.9	2.66	4.2
December.....	11.12	12.3	12.04	12.5	8.32	9.9	16.22	15.4	6.93	8.2	7.01	9.6	8.74	11.2	3.22	5.5
1957: Average.....	8.86	10.0	8.70	9.2	5.76	6.9	8.46	8.7	6.18	7.3	6.07	8.4	8.65	11.1	2.70	4.6
January.....	8.65	10.0	10.79	11.3	7.16	8.6	10.99	11.1	6.67	7.9	6.04	8.3	8.37	10.8	2.21	3.8
February.....	8.65	9.9	10.51	11.1	6.90	8.3	10.31	10.5	6.70	7.9	6.34	8.7	7.81	10.1	1.33	2.3
March.....	8.69	9.9	10.23	10.7	6.60	7.9	9.32	9.5	7.00	8.2	6.86	9.4	7.29	9.5	2.04	3.5
April.....	8.42	9.6	9.57	10.2	6.03	7.3	8.32	8.6	6.43	7.6	5.81	8.0	7.57	9.8	1.16	2.0
May.....	8.46	9.6	8.95	9.6	5.43	6.6	6.26	6.6	5.81	6.9	5.54	7.7	8.42	10.7	2.57	4.2
June.....	9.14	10.2	9.03	9.6	6.03	7.2	6.67	6.9	5.56	6.5	5.78	8.0	9.21	11.7	3.49	5.7
July.....	8.90	10.0	8.36	8.9	5.13	6.3	7.05	7.4	5.56	6.6	5.54	7.7	9.33	11.8	4.47	7.0
August.....	9.22	10.2	7.69	8.3	6.33	7.6	7.11	7.3	5.23	6.2	6.20	8.8	8.78	11.3	2.41	4.2
September.....	10.54	11.5	8.14	8.6	6.06	7.3	7.53	7.7	6.55	7.6	6.83	9.4	9.11	11.6	2.98	5.2
October.....	9.35	10.3	7.15	7.6	5.20	6.3	7.92	8.1	5.93	7.0	6.83	9.5	8.98	11.5	3.02	5.4
November.....	8.75	9.7	6.50	7.0	4.64	5.6	10.85	10.7	5.93	7.0	6.37	8.8	9.36	11.8	3.40	5.9
December.....	6.80	7.6	6.53	6.9	4.06	0.9	7.26	7.3	5.64	6.6	5.87	8.1	8.55	10.7	3.17	5.3
1958: Average.....	6.96	7.7	5.94	6.3	4.75	5.6	7.04	7.0	4.84	5.5	5.67	7.7	8.73	10.7	3.06	4.9
January.....	5.53	6.3	5.52	5.9	3.15	3.8	5.06	5.3	5.06	5.9	4.99	6.7	8.44	10.5	2.52	4.1
February.....	5.23	6.1	5.18	5.6	3.17	3.8	4.72	5.0	3.82	4.5	4.86	6.8	7.57	9.5	1.63	2.8
March.....	5.26	6.0	5.54	5.9	2.85	3.4	4.74	4.9	3.83	4.5	4.86	6.7	7.31	9.2	1.90	3.2
April.....	4.95	5.7	5.22	5.6	2.85	3.4	4.39	4.5	3.53	4.1	4.62	6.4	7.31	9.2	3.16	5.0
May.....	5.64	6.4	5.24	5.6	3.18	3.8	5.15	5.2	3.55	4.2	4.62	6.4	8.19	10.1	3.91	6.1
June.....	6.63	7.3	5.59	5.9	3.82	4.5	5.54	5.6	4.54	5.2	5.13	7.0	9.02	11.0	4.40	6.6
July.....	6.66	7.3	5.24	5.6	4.13	4.9	5.58	5.6	4.23	4.8	4.59	6.4	9.22	11.2	4.16	6.3
August.....	8.33	9.0	5.24	5.6	5.04	5.9	7.81	7.7	4.88	5.5	5.67	7.8	9.07	11.1	3.72	5.9
September.....	8.66	9.2	6.32	6.6	6.93	7.9	7.47	7.4	5.86	6.5	6.44	8.7	10.03	12.1	2.89	4.8
October.....	8.95	9.6	6.32	6.7	6.30	7.3	9.30	9.1	5.86	6.6	6.98	9.4	9.26	11.3	2.25	3.7
November.....	8.74	9.2	7.43	7.7	7.03	7.9	12.52	11.7	6.51	7.2	7.06	9.4	10.00	12.0	3.08	4.9
December.....	9.49	9.9	7.92	7.9	7.38	8.3	14.48	13.1	6.87	7.5	7.37	9.7	9.50	11.2	4.62	7.0
1959: Average.....	9.96	10.2	9.80	9.8	7.13	7.9	9.68	9.0	7.66	8.2	7.18	9.4	10.00	11.7	2.95	4.5
January.....	7.46	7.9	7.85	7.9	6.45	7.3	6.24	6.8	6.24	6.8	6.02	8.7	9.09	10.7	2.19	3.4
February.....	7.83	8.3	8.60	8.5	6.77	7.6	6.27	6.9	6.27	6.9	6.31	8.4	8.79	10.5	1.71	2.7
March.....	8.55	8.9	9.72	9.5	6.48	7.3	6.30	6.9	6.30	6.9	6.62	8.8	8.53	10.1	2.25	3.5
April.....	9.23	9.6	10.44	10.1	5.83	6.6	6.63	7.2	6.63	7.2	6.90	9.0	8.53	10.1	1.79	2.8
May.....	10.31	10.5	10.85	10.4	6.80	7.6	9.98	9.2	6.63	7.2	6.90	9.0	9.70	11.3	3.10	4.6
June.....	11.34	11.4	11.57	11.0	7.45	8.2	10.79	9.9	7.36	7.8	7.45	9.7	10.25	12.0	4.83	5.6
July.....	10.31	10.6	10.48	10.1	6.84	7.7	10.02	9.2	7.99	8.5	6.62	8.8	10.20	11.9	4.64	6.6
August.....	11.63	11.7	10.12	9.9	7.74	8.6	10.53	9.7	7.66	8.2	7.45	9.7	9.75	11.5	4.05	6.1
September.....	12.37	12.4	10.21	9.9	8.42	9.3	10.61	9.8	7.99	8.5	8.24	10.7	11.94	13.9	3.65	5.8
October.....	9.92	10.3	9.88	9.5	8.14	8.9	9.83	9.0	8.36	8.8	8.51	11.0	10.91	12.7	3.04	4.8
November.....	7.90	8.3	9.19	8.9	7.19	7.9	7.41	7.1	8.74	9.2	7.45	9.7	11.07	12.6	2.51	3.9
December.....	10.49	10.5	10.70	10.1	7.92	8.5	9.90	8.9	9.11	9.5	7.61	9.7	10.61	12.0	2.77	4.1
1960: January.....	11.28	11.2	10.33	9.8	7.99	8.6	15.05	13.0	7.46	7.9	6.80	8.7	10.40	11.7	3.30	5.0
February.....	9.52	9.7	10.74	10.3	6.69	7.4	12.67	11.3	7.83	8.3	7.09	9.1	8.82	10.2	1.52	2.5
March.....	8.81	9.0	10.37	9.8	6.36	7.0	11.09	10.0	7.87	8.2	6.77	8.7	9.18	10.6	1.28	2.1
April.....	7.43	7.7	8.93	8.6	4.03	4.5	8.32	7.7	5.81	6.2	5.39	7.1	8.90	10.2	2.14	3.3
May.....	9.24	9.2	10.04	9.5	5.71	6.3	9.50	8.6	6.87	7.2	6.24	8.0	9.81	11.0	2.67	3.9

NOTE: Data for the two most recent months are preliminary.

TABLE 4. AVERAGE WEEKLY OVERTIME EARNINGS AND PERCENT OF GROSS WEEKLY EARNINGS OF FACTORY PRODUCTION WORKERS, BY MAJOR INDUSTRY GROUP, JANUARY 1956-JUNE 1960—Continued

Year and month	Nondurable goods—Continued													
	Textile mill products		Apparel and other finished textile products		Paper and allied products		Chemicals and allied products		Products of petroleum and coal		Rubber products		Leather and leather products	
	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent	Earnings	Per cent
1956: Average.....	\$5.46	9.5	\$2.57	4.9	\$12.70	15.3	\$7.07	8.1	\$7.41	7.1	\$8.78	10.1	\$3.09	5.5
January.....	6.17	10.8	2.67	5.3	12.62	15.5	6.90	8.1	7.08	7.1	10.82	12.4	4.23	7.5
February.....	5.96	10.4	2.08	5.9	11.75	14.8	6.60	7.8	6.48	6.5	8.38	9.8	4.69	8.1
March.....	5.63	9.5	2.77	8.2	12.62	15.5	6.60	7.8	8.09	7.8	7.18	8.5	3.94	6.9
April.....	5.00	8.9	2.23	4.5	12.15	15.1	7.27	8.5	7.44	7.1	7.80	9.1	2.87	5.2
May.....	4.83	8.6	2.12	4.2	11.67	14.4	6.73	7.8	6.70	6.5	7.52	8.8	2.44	4.5
June.....	4.62	8.3	1.98	3.7	12.08	14.7	7.11	8.1	8.18	7.8	7.18	8.5	2.21	3.9
July.....	4.62	8.3	2.16	4.1	13.32	15.8	7.18	8.2	8.96	8.4	7.84	9.1	2.43	4.3
August.....	5.04	8.9	2.61	4.8	12.83	15.4	6.86	7.8	7.81	7.5	8.82	10.1	2.06	4.7
September.....	5.04	8.8	2.41	4.5	13.46	15.9	7.80	8.5	8.69	8.0	9.54	10.7	2.46	4.4
October.....	6.05	10.1	2.85	5.2	13.54	15.9	7.18	8.1	7.50	7.2	10.76	12.0	2.68	4.8
November.....	6.31	10.5	2.85	5.3	13.25	15.7	6.90	7.7	7.15	6.8	8.82	10.0	2.70	4.8
December.....	5.87	9.7	2.65	4.9	13.04	15.2	7.25	8.1	6.80	6.5	10.32	11.1	2.91	5.1
1957: Average.....	4.82	8.3	2.43	4.5	12.51	14.5	7.13	7.8	7.38	6.8	9.16	10.0	2.96	5.1
January.....	5.00	8.5	2.21	4.1	12.47	14.8	6.96	7.8	6.10	5.7	9.68	10.6	2.93	5.1
February.....	5.04	8.6	2.65	4.9	12.26	14.5	6.65	7.4	6.02	5.8	8.71	9.6	3.15	5.4
March.....	5.04	8.0	2.65	4.9	12.03	14.2	7.00	7.8	6.05	5.8	8.35	9.4	2.94	5.0
April.....	4.60	7.9	2.41	4.6	12.03	14.3	7.00	7.8	8.32	7.8	7.67	8.8	2.51	4.4
May.....	4.38	7.6	2.19	4.1	11.52	13.6	7.06	7.8	8.28	7.9	8.10	9.1	2.05	3.7
June.....	5.04	8.6	2.19	4.1	12.22	14.3	7.16	7.8	7.80	7.2	10.00	11.0	2.74	4.7
July.....	4.60	7.9	2.44	4.5	13.52	15.5	7.56	8.2	8.65	7.7	12.43	13.2	2.94	5.0
August.....	4.82	8.2	3.11	5.6	13.23	15.1	7.23	7.4	7.10	6.5	10.46	11.3	3.49	5.8
September.....	5.26	8.9	3.11	5.6	14.18	15.9	7.56	8.2	8.78	7.7	9.95	10.7	2.96	5.1
October.....	5.07	8.6	2.65	5.0	13.37	15.2	7.19	7.8	7.16	6.5	9.70	10.4	2.75	4.8
November.....	5.07	8.7	2.44	4.6	11.94	13.7	7.26	7.8	7.61	6.8	9.45	10.1	3.00	5.2
December.....	4.60	7.9	2.00	3.8	11.34	13.0	6.96	7.5	6.03	5.4	7.43	8.0	2.75	4.7
1958: Average.....	4.63	7.9	2.46	4.6	11.82	13.3	6.78	7.2	6.05	5.5	7.87	8.5	2.55	4.4
January.....	3.75	6.6	1.79	3.4	10.75	12.5	6.33	6.8	5.63	5.1	5.06	5.8	2.54	4.4
February.....	3.75	6.6	2.22	4.2	10.45	12.2	6.36	6.9	4.82	4.4	4.37	5.1	2.77	4.8
March.....	3.75	6.6	1.98	3.8	10.50	12.2	6.33	6.9	4.82	4.4	4.39	5.0	2.33	4.1
April.....	3.09	5.6	1.78	3.4	9.65	11.3	6.33	6.9	6.05	5.5	4.05	4.7	1.40	2.6
May.....	3.31	5.9	1.78	3.4	10.25	11.9	6.38	6.8	6.41	5.8	5.06	5.8	1.86	3.4
June.....	4.19	7.2	1.78	3.4	11.51	13.0	6.78	7.1	6.43	5.7	8.14	8.9	2.09	3.6
July.....	4.41	7.6	2.22	4.2	11.88	13.4	6.84	7.2	7.70	6.8	7.52	8.2	2.30	4.0
August.....	5.04	8.5	2.91	5.2	13.40	14.8	7.18	7.5	6.81	6.2	10.35	10.7	2.77	4.8
September.....	5.51	9.2	2.93	5.3	13.70	15.0	7.52	7.8	7.29	6.5	10.40	10.7	2.81	4.8
October.....	6.17	10.1	2.93	5.3	13.70	15.0	7.49	7.8	6.05	5.5	9.70	10.0	3.26	5.6
November.....	6.62	10.8	2.91	5.3	13.46	14.8	8.93	9.2	6.12	5.4	9.79	10.0	3.28	5.5
December.....	6.39	10.5	2.91	5.3	13.22	14.5	7.59	7.8	5.71	5.1	13.34	13.0	3.74	6.1
1959: Average.....	7.07	11.1	3.13	5.6	14.42	15.3	8.78	8.8	7.89	6.5	13.10	12.9	3.32	5.5
January.....	5.77	9.5	2.49	4.5	12.98	14.2	7.25	7.5	6.96	6.1	11.28	11.2	4.68	7.5
February.....	6.44	10.4	3.15	5.6	13.60	14.8	7.59	7.8	5.48	4.8	12.93	12.8	4.24	6.8
March.....	6.80	10.7	3.15	5.6	13.91	15.0	7.94	8.1	7.98	6.7	14.10	13.6	3.53	5.8
April.....	6.84	10.8	3.13	5.6	13.66	14.7	9.27	9.4	7.61	6.4	12.93	12.7	2.61	4.4
May.....	6.84	10.7	3.13	5.6	14.28	15.3	9.05	9.1	6.77	5.8	13.46	13.3	2.84	4.7
June.....	7.52	11.7	3.11	5.6	14.35	15.2	8.46	8.4	7.19	6.1	13.69	13.9	3.08	5.0
July.....	7.07	11.1	3.11	5.6	14.81	15.6	8.53	8.5	9.73	8.2	17.14	16.0	3.06	5.0
August.....	7.32	11.6	3.77	6.6	15.44	16.1	8.85	8.8	8.37	7.2	16.28	15.5	3.08	5.1
September.....	7.11	11.2	3.38	6.1	16.22	16.8	11.11	10.6	9.76	8.1	15.16	14.9	2.84	4.8
October.....	7.34	11.4	3.35	6.1	14.63	15.3	8.85	8.8	8.82	7.5	12.50	12.4	2.84	4.9
November.....	7.34	11.4	3.60	6.4	14.31	15.0	8.53	8.4	7.67	6.5	8.96	9.2	3.34	5.5
December.....	7.34	11.3	3.15	5.6	13.67	14.4	8.60	8.4	6.41	5.4	10.12	10.0	3.34	5.5
1960: January.....	6.93	10.7	2.94	5.3	13.80	14.5	8.25	8.1	6.86	5.9	11.25	11.0	3.36	5.4
February.....	6.93	10.8	3.19	5.7	13.48	14.2	8.64	8.5	6.41	5.5	10.12	10.1	3.36	5.5
March.....	7.02	11.0	3.21	5.7	13.16	14.0	8.28	8.1	5.99	5.1	8.31	8.5	3.38	5.6
April.....	5.85	9.2	2.27	4.2	11.88	12.7	10.76	10.3	7.32	6.1	5.10	5.4	1.96	3.4
May.....	6.64	10.2	3.17	5.7	13.55	14.2	9.44	9.1	6.39	5.4	8.78	8.7	2.45	4.1

NOTE: Data for the two most recent months are preliminary.

ings dropped by \$3.24, or 4 percent; the increase in consumer prices during this period brought the reduction in real earnings to 9 percent (chart 4).

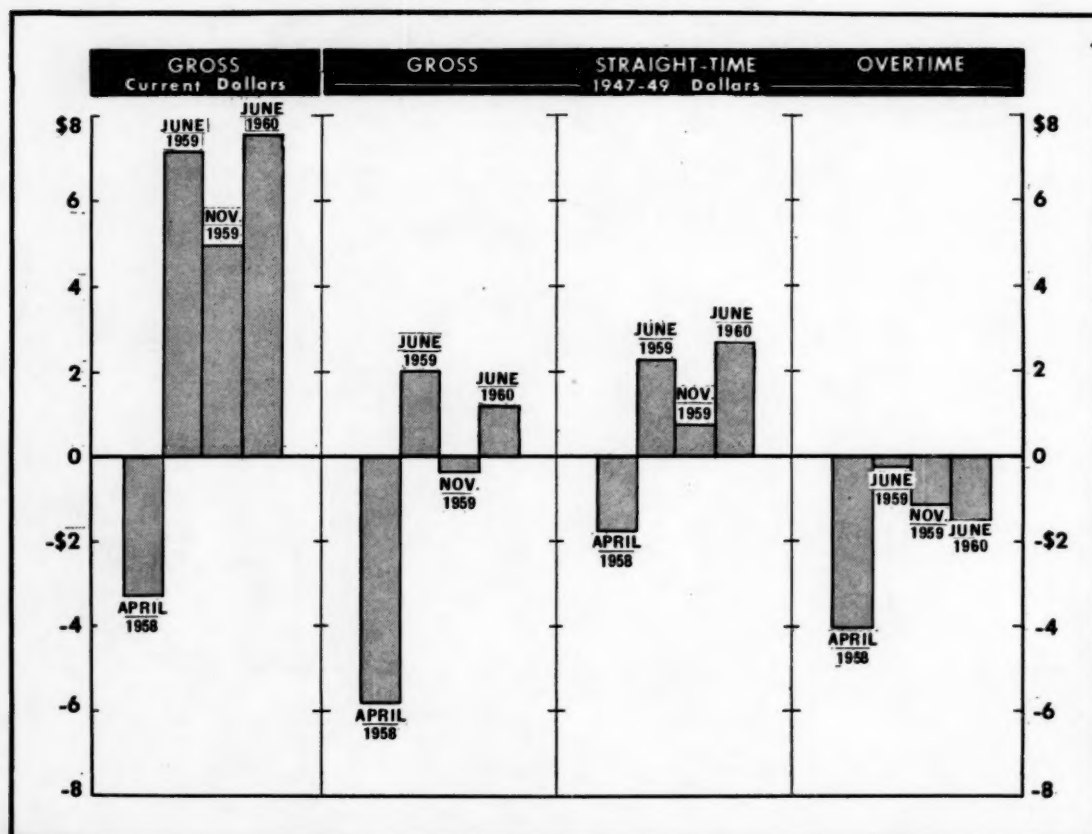
*The Recovery Period.* In the recovery period from April 1958 until June 1959, just before the steel strike, the factory worker's paycheck increased by about one-eighth in both money and real earnings. This was one of the largest gains in real earnings recorded in recent years for a period of this length.

While continued gains in wage rates and a temporary halt in price increases were elements in this growth in real earnings, the biggest factor was an increase of nearly 2½ hours in the length of the workweek. During this period, earnings

from regular hours increased slightly more than earnings from overtime hours, even though the number of premium overtime hours actually rose more (1.4 versus 1.0 hours). However, since wage rates rose and since there are more regular hours than overtime hours, the increase in real straight-time weekly earnings was slightly higher than the increase in real overtime earnings.

During the latter half of 1959, average weekly earnings declined sharply because of the extended steel strike which began in July. Again, this was not because of reductions in individual workers' pay but because the average reflected the absence from the payroll of higher paid steelworkers and of workers in other high-wage industries which were affected by steel shortages. The recovery

Chart 5. Changes in Gross Average Weekly Earnings and Buying Power of Factory Production Workers From December 1956 to Specified Dates





from this strike was brought up short in early 1960 by a number of temporary factors that obscured the economic situation. The large increase in illness in February, the exceptionally bad weather in March, and the occurrence of religious holidays during the survey week in April reduced the averages for both factory hours and earnings, and a small rise in consumer prices during this period reduced factory workers' buying power. By June 1960, the latest month for which data were available, real earnings were 2 percent above November, the employment low in the steel strike, but still about 1 percent below the prestrike level.

In summary, at the bottom of the recession (April 1958), earnings adjusted for price changes (in 1947-49 dollars) were almost \$6, or 8 percent, below the previous peak in manufacturing in December 1956. Between April 1958 and June 1959, these real earnings advanced almost \$8, or 12 percent. By the latter part of 1959, they had declined about \$2.50, or 3 percent, being about the same as at the December 1956 peak. In June 1960, they were somewhat above this level (chart 5).

*The Role of Overtime Work in Earnings.* Some overtime work is reported in each of the manufacturing industries in both good times and bad. Apparently even in bad times, temporary exigencies and problems in scheduling require that some factory workers put in overtime (table 3).

In the prerecession period, overtime earnings averaged about \$8, or 10 percent, of factory

workers' pay. In 1956, they ranged from 15 percent of total weekly earnings in the paper industry to 4 percent in the tobacco industry. Overtime earnings were 8 percent or more of total earnings in 16 of the 20 manufacturing industries; these included all of the durable goods industries.

Between December 1956 and April 1958, both straight-time and overtime earnings dropped (after deflation for price changes), with the decline in overtime more than twice as sharp. At the bottom of the recession, overtime represented only 6 percent of the reduced amount of total earnings. In real terms, overtime earnings declined from \$8 to \$4. Real straight-time earnings fell by about \$1.75 during this period. Every industry group in manufacturing reported a decrease in real overtime earnings, and three-fifths reported drops in real straight-time earnings. At the recession low point (April 1958), overtime earnings were less than 8 percent of total earnings in all but four industries.

In the early months of the recovery period (April to November 1958), overtime earnings increased more rapidly in dollar amounts (and at a markedly more rapid rate) than straight-time earnings, but the subsequent increase in straight-time earnings was substantially greater (table 4). But mid-1959 overtime earnings again contributed about 10 percent to total earnings, or the same proportion as in 1956. During recent months (2d quarter 1960), the proportion has been slightly lower (9 percent).

# Special Labor Force Reports

**EDITOR'S NOTE.**—*The article which follows and the one beginning on p. 828 of this issue are part of a series of reports on special labor force subjects formerly covered in Series P-50 of the Bureau of the Census Current Population Reports. Reprints of all the articles, with additional detailed tables and a description of methodology, are available on request to the Bureau or to any of its regional offices (listed on the inside front cover of this issue).*

*The reprint of the article immediately following will include tables showing both original data and revised seasonally adjusted data for 1947 or 1948 to 1959 for 23 labor force series. It will also contain a reproduction of a full print-out from the computer which illustrates each step of the revised method of seasonal adjustment, together with a step-by-step description of the procedure.*

## New Seasonal Adjustment Factors for Labor Force Components

MORTON S. RAFF AND ROBERT L. STEIN\*

THE NUMBER OF PEOPLE in the labor force and the number employed or unemployed are subject to seasonal variation, that is, changes which recur regularly at certain times of the year. This seasonal fluctuation, reflecting the recurrent ebbs and flows in economic activity due to the weather, crop-growing cycles, holidays, vacations, regular industry model changeover periods, and the like, is generally the largest single component of month-to-month change in both employment and unemployment. Therefore, seasonal adjustment—the measurement of seasonality and the removal of its influence from the data in order to ascertain more basic trends—has become an indispensable tool of labor force analysis.

Until fairly recently, the attempt to develop suitable methods for seasonal adjustment has been seriously limited by the vast amount of clerical work involved. The application of electronic data processing equipment to this problem has permitted much more rapid progress, particularly in the last 5 years.

The pioneering work in the application of electronic computers to the adjustment of economic data in general, and to unemployment and other labor force series in particular, was done by the Bureau of the Census.<sup>1</sup> The Bureau first published seasonal adjustment factors for unemployment in January 1955. They were updated periodically and were revised from time to time in accordance with improvements in methodology. The adjustment procedures were subsequently extended to other labor force series. The factors for the major labor force components which had been in use from January 1958 to January 1960 were based on seasonal trends for the period 1947 to 1957.<sup>2</sup>

This article describes a revised method, developed at the Bureau of Labor Statistics, for computing seasonal adjustment factors. The new factors, which were introduced with the publica-

\*Of the Office of Statistical Standards and the Division of Manpower and Employment Statistics, Bureau of Labor Statistics.

<sup>1</sup> See Julius Shiskin and Harry Eisenpress, *Seasonal Adjustment by Electronic Computer Methods* (in *Journal of the American Statistical Association*, December 1957), reprinted as Technical Paper No. 12 by the National Bureau of Economic Research, Inc. Also see Julius Shiskin, *Electronic Computers and Business Indicators* (in *Journal of Business*, October 1957), reprinted as Occasional Paper 57 by the NBER.

<sup>2</sup> Those factors, together with a detailed description of the methodology used, were published in *Seasonal Variations in the Labor Force, Employment, and Unemployment*, Bureau of the Census, Series P-50, No. 82 (April 1958).

tion of February 1960 data, reflect improvements in methodology resulting from research conducted during the past year.

### The BLS Method of Seasonal Adjustment

The present revision is based on data for 1958 and part of 1959, as well as the 1947-57 period. In addition, some changes were made in method, primarily to reduce the sensitivity of the former method to the addition of current data at the end of the series. The revised procedure is based on the same ratio-to-moving average method as used formerly but differs from the former method in three important respects: (1) It uses a different procedure for ascertaining the underlying trend and cyclical fluctuations; (2) it is less sensitive to peculiarities near the end of the series; and (3) it handles extreme values differently.

<sup>3</sup> The original data for periods before 1957 have been adjusted, insofar as possible, for the changes in the definitions of employment and unemployment adopted in January 1957. At that time, 2 groups numbering between 200,000 and 300,000 which were formerly classified as employed ("with a job but not at work") were assigned to different classifications, mostly to the unemployed. For a full explanation, see Monthly Report on the Labor Force, February 1957 (Current Population Reports, Labor Force, Series P-57, No. 176).

Table 1 presents the revised seasonal factors—to be used for adjusting 1958 and later data—for the following 23 labor force series: the 6 major series (civilian labor force, total employment, agricultural employment, nonagricultural employment, unemployment, and the unemployment rate) for both sexes and for male and female; unemployment of both sexes by 3 duration groups (under 5 weeks, 5 to 14 weeks, 15 weeks and over); and unemployment of males and females aged 20 and over.<sup>3</sup> Because seasonal patterns tend to change over time, the seasonal adjustment factors will be recomputed at regular intervals, incorporating later data, and will be reviewed to determine whether any change in the factors or methods is warranted.

*Description of the New Procedure.* The new adjustment procedure, like the old, divides the series of actual data into three components: The trend-cycle, or the smooth curve which shows the underlying movement of the series; the seasonal component, or the part which is related to the particular month of the year and which has approximately the same pattern from one year to the next; the irregular component, or the fluctua-

TABLE 1. SEASONAL ADJUSTMENT FACTORS FOR THE CIVILIAN LABOR FORCE AND SELECTED COMPONENTS FOR USE IN THE PERIOD 1958-60

Series	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Civilian labor force:												
Both sexes.....	97.7	98.0	98.4	99.0	100.1	102.4	102.7	101.8	100.4	100.6	100.0	99.1
Male.....	98.2	98.4	98.8	99.2	100.0	102.7	103.1	102.4	99.9	99.7	99.3	98.7
Female.....	96.7	97.3	97.6	98.4	100.4	101.8	101.7	100.6	101.5	102.7	101.4	99.9
Total employment:												
Both sexes.....	96.9	97.0	97.7	98.6	100.1	101.8	102.4	102.3	101.2	101.8	100.5	99.4
Male.....	97.2	97.0	97.7	98.8	100.1	102.4	103.2	103.0	101.0	101.0	100.1	98.7
Female.....	96.2	97.0	97.7	98.4	100.3	100.7	101.0	100.7	101.9	103.6	101.7	100.8
Agricultural employment:												
Both sexes.....	81.3	81.8	86.2	93.6	106.0	118.2	117.9	111.1	100.9	112.0	97.4	85.0
Male.....	88.0	88.3	91.8	97.7	103.8	111.7	111.4	108.7	104.4	106.0	98.4	90.1
Female.....	52.3	53.3	61.5	76.1	116.4	148.7	138.4	123.1	134.9	130.5	93.8	62.6
Nonagricultural employment:												
Both sexes.....	96.6	98.7	99.0	99.2	99.5	100.0	100.7	101.3	100.2	100.7	100.9	101.0
Male.....	98.5	98.3	98.5	99.0	99.6	101.1	101.7	102.3	100.4	100.2	100.2	99.9
Female.....	99.0	99.7	100.0	99.8	99.3	97.8	98.7	99.3	99.8	101.5	102.0	103.1
Unemployment:												
By sex:												
Both sexes.....	114.2	116.3	111.1	103.1	99.4	113.2	105.0	91.2	83.9	78.8	90.0	93.8
Male.....	119.5	124.0	118.6	107.1	97.7	109.2	100.7	86.8	77.9	74.7	85.9	96.5
Males aged 20 and over.....	123.9	129.4	123.8	111.5	98.2	96.5	92.2	84.7	78.3	75.5	85.8	100.9
Female.....	104.3	102.2	97.1	96.1	102.8	120.9	113.1	99.4	95.5	86.7	97.9	84.2
Females aged 20 and over.....	111.2	106.9	102.4	99.8	101.1	100.9	103.2	100.3	97.4	90.2	99.3	88.8
By duration:												
1 to 4 weeks.....	114.5	98.5	89.3	88.1	94.6	136.2	109.3	93.5	92.0	84.0	102.5	98.0
5 to 14 weeks.....	128.9	149.0	134.7	101.5	89.9	86.8	103.5	88.0	71.2	68.7	81.2	95.2
15 weeks or more.....	95.0	115.8	127.9	138.3	121.9	99.2	94.6	88.0	81.8	79.6	75.1	82.8
Unemployment rate: <sup>1</sup>												
Both sexes.....	116.7	118.6	112.9	104.1	99.2	110.4	102.3	89.5	83.5	78.2	89.9	94.4
Male.....	121.6	125.9	120.0	107.7	97.7	106.2	97.4	84.6	77.8	74.8	86.2	99.6
Female.....	108.2	106.2	99.3	97.7	102.4	118.6	111.0	98.6	94.0	84.3	96.6	84.2

\* The adjustment factors for these series were computed by an earlier developmental version of the BLS method and differ slightly for some months from the results of the current method. All but one of the differences are 0.1; in that case, the difference is 0.2.

<sup>1</sup> Unemployed as percent of civilian labor force in category.

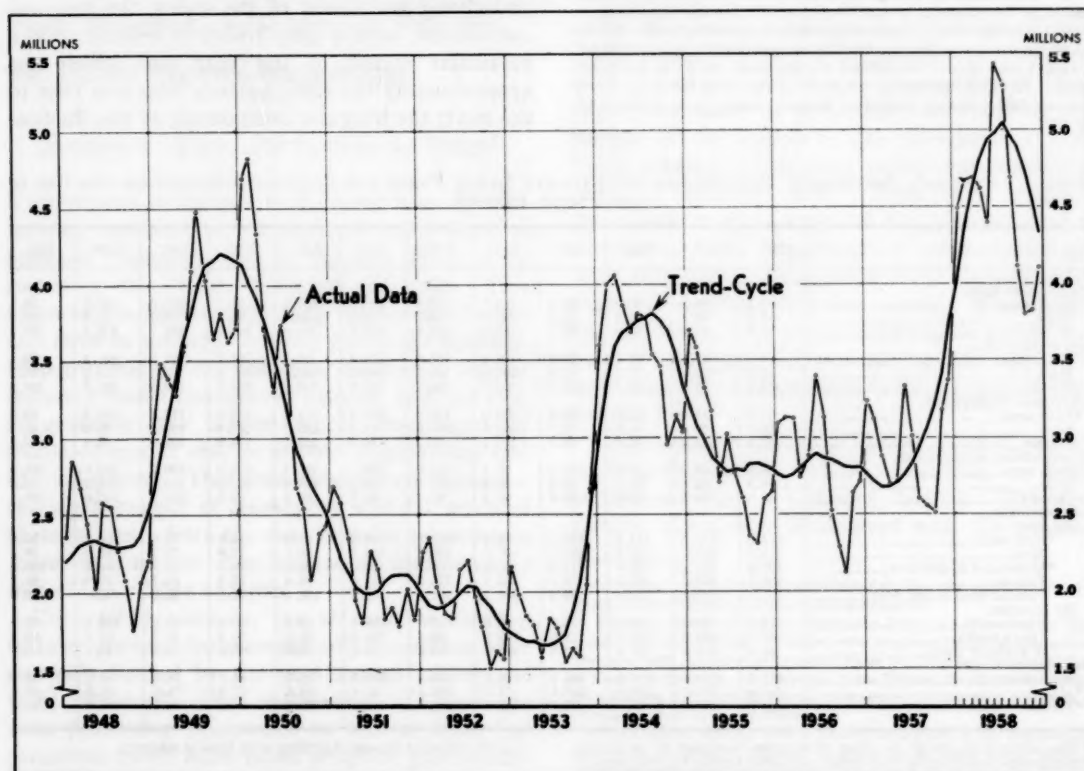
tions remaining after fitting the trend-cycle and seasonal. The decomposition of total unemployment for the period 1948-58 is illustrated in charts 1 and 2. Chart 1 shows the actual data and the smooth trend-cycle; the seasonal and the irregular component are plotted in chart 2. The seasonally adjusted series is the quotient of the original data divided by the seasonal component; it may also be derived as the product of trend-cycle and irregular. These relationships are illustrated for the year 1958 in table 2.

The computations performed in developing a seasonally adjusted series are a series of successive approximations, in which each iteration (i.e., cycle of computing steps) gets closer to the desired final result. Each iteration begins with an estimate of the trend-cycle (the first such estimate being the 12-month moving average of the original data). This estimate is divided into the original

values to produce seasonal-irregular ratios. A weighted moving average of these ratios for the same month of 5 consecutive years is then used to remove the irregular part and thus provide an estimate of the seasonal component, after a minor adjustment to preserve the average level of the series. The seasonals are then divided into the seasonal-irregulars to obtain the irregular component.

If the estimated trend-cycle is a good fit, then the irregular component will have a random appearance as in the lower half of chart 2. If, on the other hand, there are places where the trend-cycle does not fit well—as when a moving average fails to penetrate the peaks and troughs in the series—then the irregular component will include a residual trend-cycle in addition to erratic fluctuations. A weighted 7-month moving average of the irregulars captures most of the residual

**Chart 1. United States Unemployment, Actual Data and Trend-Cycle, 1948-58<sup>1</sup>**



<sup>1</sup> For derivation of data, see text.



TABLE 2. DECOMPOSITION OF TOTAL UNEMPLOYMENT, 1958

Month	Actual number unemployed (in thousands)	Trend-cycle (in thousands)	Seasonal (percent of average values)	Irregular (percent of average values)	Seasonally adjusted (in thousands)
January.....	4,494	4,040	114.2	97.4	3,935
February.....	5,173	4,368	116.3	101.8	4,448
March.....	5,198	4,611	111.1	101.5	4,679
April.....	5,120	4,807	103.1	103.3	4,966
May.....	4,904	4,944	99.4	99.8	4,934
June.....	5,437	4,984	113.2	96.4	4,833
July.....	5,294	5,045	105.0	99.9	5,042
August.....	4,669	4,969	91.2	103.7	5,152
September.....	4,111	4,890	83.9	100.2	4,900
October.....	3,805	4,728	78.8	102.1	4,829
November.....	3,833	4,535	90.0	93.9	4,250
December.....	4,108	4,335	93.5	101.4	4,394

trend-cycle; this is then multiplied by the previous estimate of trend-cycle to provide a better trend-cycle with which to start the next iteration.

Altogether, three iterations are performed, since investigation has shown that this is the optimum number. Fewer iterations leave an irregular component which still contains some trend-cycle. More iterations make the trend-cycle too bumpy and the irregular too smooth. The basis of this judgment is explained more fully later.

The procedure also includes a routine for handling extreme values that do not seem to belong to the general pattern of the data. (Such values might have a real economic cause like a strike, or they might be simply mistakes.) A test is made after the third cycle of computations to see if there are any extreme values. The test procedure uses special weighting patterns which give zero weight to the central value in computing the criterion against which each "test" irregular is judged, in order to avoid contaminating the criterion. The distribution of the "test" irregulars is then examined to see whether any of them lie outside specified control limits.

If the test reveals no extreme values, the procedure is finished at this point except for calculating the seasonally adjusted series. If extreme values do exist, each such value in the original series is replaced by a synthetic value which is the product of the "test" trend-cycle and the "test" seasonal. The regular three-iteration procedure is then re-

peated from the beginning, using the synthetic replacement values. At the very end, after the final trend-cycle and seasonal components have been computed, the actual original values are restored in order to compute the irregular component and the seasonally adjusted series. Thus the "extremeness" of an extreme value is placed entirely in the irregular component and is not permitted to influence the trend-cycle or the seasonal factors. In chart 2, the high irregular for October 1949 is caused by an extreme value.

**Computer Program.** The entire procedure has been programmed for the International Business Machine 650 basic computer system with card input and card output. All intermediate steps are performed automatically. Users may obtain either a long print-out, which includes the complete set of tables, or a short print-out which omits most of the intermediate results. Either print-out includes the list of extreme values, which not only indicates the genuine extreme values but may also call attention to mistakes in the input data.

The program is designed to take monthly series ranging from 7 to 13 years in length. After the input cards are punched, the total time for the long print-out of an 11-year series having extreme values is 19 minutes on the computer plus 11 minutes on a tabulator for printing the results; the corresponding times for the short print-out are 14 minutes on the computer plus 4 minutes on the tabulator. If there are no extreme values, the computer time is reduced by one-third and the tabulator time by one-half.

### Philosophy of the BLS Method

The departures of the revised method from earlier practice are best understood in terms of the BLS objectives and the difficulties which arose in using the former adjustment method.<sup>4</sup> Our main purpose in such analyses is to find the best seasonal factors with which to adjust current data. Information about the past is valued primarily as a guide to interpreting the present, rather than for its own sake. In this perspective, it was disturbing to find that the former method required changes of up to 7 percent in several of the monthly factors when 1958 data were added to the 1947-57 unemployment series.<sup>5</sup> The unreasonableness of such

<sup>4</sup> This was the Census Bureau's Univariate Method II.

<sup>5</sup> The Census, like the BLS, has been studying modified methods in an attempt to cope with this problem. The basic approach of both agencies is suggested in Frederick R. Macaulay, *The Smoothing of Economic Time Series* (New York, National Bureau of Economic Research, Inc., 1931) and is illustrated in detail in H. C. Barton, Jr., *Adjustment for Seasonal Variation* (in Federal Reserve Bulletin, June 1941).

large changes was recognized by an interagency committee, which decided to continue using the old seasonal factors until stronger evidence became available about changes in the seasonal pattern.

The need to cope with this problem led to an intensive reexamination of the whole rationale of seasonal adjustment, with particular attention to the selection of suitable compromises between the goals of smoothness in the trend-cycle, regularity in the seasonal, and randomness in the irregular. Working with the volatile unemployment series, we were not sure that a satisfactory mechanical procedure could be developed but felt that any successful approach would have to involve the following ideas:

1. Each of the three components should be used explicitly in every stage of the iterative procedure.
2. A trend-cycle should not contain short-term fluctuations but may include effects lasting as long as 4 or 5 months.

3. A seasonal pattern may change gradually over the years but should not change suddenly or erratically.

4. Small departures from randomness are acceptable in the irregular component as the price of keeping short-term fluctuations out of the trend-cycle.

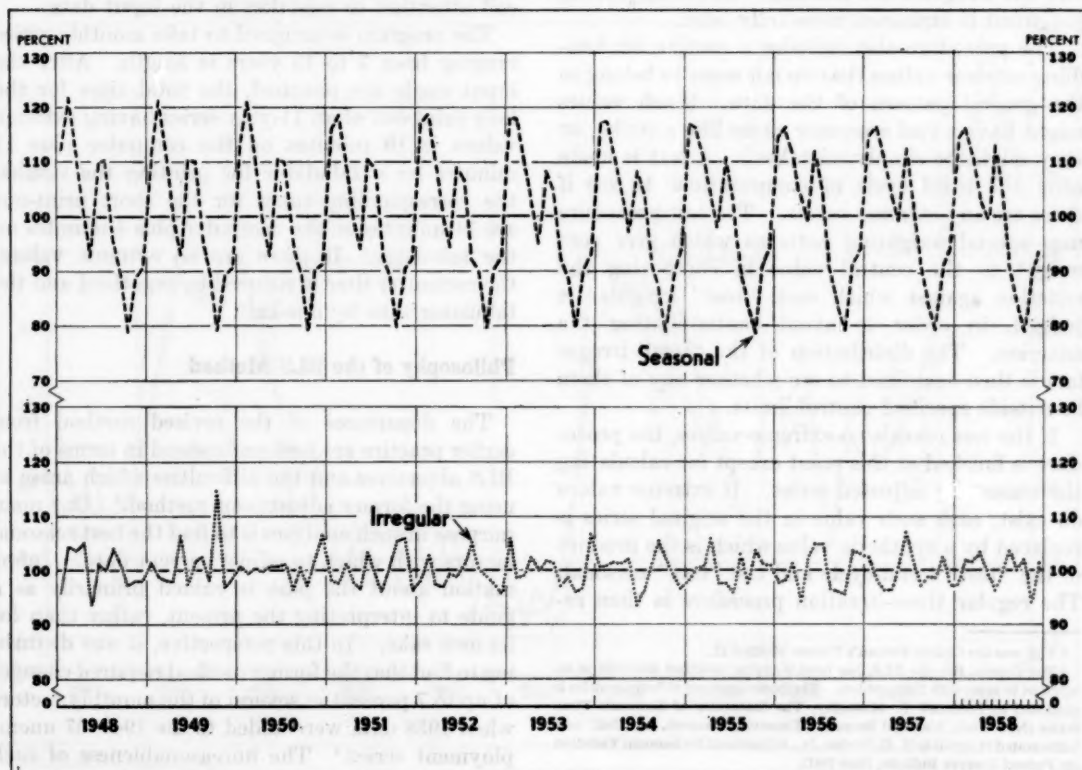
5. Great caution is desirable in designating extreme values, in order to avoid mistreating values which really belong to the normal pattern. But genuinely extreme values should be prevented from influencing the determination of the trend-cycle and seasonal components.

The working out of these ideas led to a procedure including the following features:

1. The decomposition period is 6 months shorter at each end than the original series, in order to avoid extrapolation of the vital trend-cycle component. (Thus, the 1948-58 decomposition of unemployment, illustrated in charts 1 and 2, uses data from July 1947 through June 1959.)

2. The removal of the irregular part of the seasonal-irregular ratios uses a weighted moving average having the same number of terms (five) in all parts of the series. This is done to reduce the instability in the seasonal factors which may arise from excessive emphasis on the end years if fewer terms are used near the ends of the series.

**Chart 2. United States Unemployment, Seasonal and Irregular Components, 1948-58<sup>1</sup>**



<sup>1</sup> For derivation of data, see text.

3. The test for extreme values is not made until there have been enough iterations to achieve a good trend-cycle. The test uses a single combined distribution instead of a separate distribution for each month, because a significance test with the unemployment series failed to show any justification for treating the months separately.

### Limitations of Seasonal Adjustment

Although the methodology used in seasonal adjustment has been continually improved and probably will be further refined in the future, seasonal adjustment is still only an approximation based on the average of past experience. Despite the advances in methodology, no mechanical adjustment process can by itself replace careful evaluation and analysis of the data.

One basic problem is that the seasonal pattern for the current year will never be exactly like the average for any set of past years. For example, although outdoor activity expands and contracts each year in line with changes in weather conditions, outdoor employment in particular survey weeks may deviate from previous patterns for that time of year because of unusual weather. Although Easter occurs every spring, its timing in relation to the March and April surveys varies from year to year. Although new automobile models are introduced each year, the start of the plant shutdowns for retooling may vary from one year to the next by as much as 2 or 3 months. Adjustments geared to the dates of holidays and other seasonal events with variable timing from year to year would have to be based on fewer observations and consequently would be less precise than the regular monthly adjustments that were used.

In addition to this general problem which besets virtually all economic data, the interpretation of seasonally adjusted labor force figures is complicated by the problems of measurement inherent in the original data. As shown in the following tabulation, the unadjusted data are subject to appreciable sampling error, and the adjustment process adds to the uncertainty in the seasonally adjusted values. (The variance of any seasonal factor is one-fifth the variance of the values of the irregular

component.) Moreover, the problems of accurate reporting of marginal types of labor force activity may cause a certain volatility in the overall series and even more in some of the component series (such as particular age-sex groups).

Series	Standard error <sup>1</sup> of—		
	Unadjusted data (month-to-month change, consecutive months)	Seasonal factors (percent)	Adjusted series (month-to-month change, consecutive months)
Total employment.....	180,000	0.14	220,000
Agricultural.....	120,000	.9	150,000
Nonagricultural.....	180,000	.11	200,000
Total unemployment.....	100,000	1.4	140,000

<sup>1</sup> The standard error is a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. The chances are about 2 out of 3 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 19 out of 20 that the difference would be less than twice the standard error.

The present method of adjustment is not entirely satisfactory for adjusting monthly changes in unemployment during periods of recession when unemployment is rising sharply, because the seasonal pattern is expressed as a percentage of the series itself. This amounts to assuming that seasonal unemployment is the same percentage of total unemployment when total unemployment is high as when it is low. Clearly, this is not always the case. Some seasonal unemployment is related to factors that do not vary with the level of unemployment, such as the number of students leaving school in a given year. The percentage method of seasonal adjustment will therefore tend to overadjust when unemployment is unusually high.

Research is continuing on ways of improving the seasonal adjustment methods. One of the techniques under investigation is the adjustment of series by age-sex components instead of direct adjustment of the totals. Preliminary results indicate that this approach may overcome some of the problems in the seasonal adjustment of unemployment. In the meantime, much progress has been made and the present procedure appears to be a relatively satisfactory method for seasonal adjustment of labor force data.

## Family Characteristics of Workers, 1959

JACOB SCHIFFMAN\*

MARRIED WOMEN continue to be the major source of labor force growth in the United States in recent years, despite much earlier age at marriage, larger families, and rising incomes—circumstances generally associated with reduced labor force activity of women.

Information obtained from the latest annual survey on the family characteristics of workers,<sup>1</sup> conducted by the Bureau of the Census and tabulated for the Bureau of Labor Statistics, enables a better understanding of the factors influencing the growing labor force activity of married women as well as of other family members. Some of these factors, discussed in the following article, are the presence and age of children, the education of wives, and the employment status and income of husbands.

### Labor Force Activity of Married Women

The number of married women in the labor force increased by 4.2 million in the past 10 years to 12.2 million in March 1959 (table 1), accounting for nearly three-fifths of the Nation's labor force growth over this period. Close to one-half of the additional number of married women workers were mothers with only school-age children although they comprise only one-fourth of all wives in the population. Some of the increase among working wives<sup>2</sup> with school-age children resulted from the larger population in this group but most of the growth was due to a rapidly rising rate of labor force participation<sup>3</sup>—up from 27.3 to 39.8 percent.

Though not as dramatic, substantial increases in labor force and rates of labor force participation also occurred among married women with preschool-age children and those with no children under 18 years of age. Their numbers in the labor force increased by 1.2 million and 1.1 million, respectively, over the period.

*Presence and Care of Children.* As repeated surveys have shown, the presence and age of children are probably the principal factors governing women's labor force activity. Mothers are less likely to work when there are young children in the family—particularly when there are several of preschool age. The probability of being in the labor force is considerably greater for mothers of school-age children and greater still for wives with no children of school age or younger. Only 18.7 percent of the wives with children under 6 years of age were in the labor force in March 1959, compared with 39.8 percent of those with children 6 to 17 years old only. Women with no children under 18 years of age had much higher participation rates than women of corresponding age who had children. Because many of these women are older and are less likely to work, their overall rate (35.2 percent) was somewhat lower than for the group with children of school age. (See table 2.)

In families with children under 3 years of age, very few mothers worked regardless of the presence of older children. Even when the other children were 12 to 17 years of age, only 19 percent of the mothers were in the labor force. (See table 3.)

During the course of a year, a considerably greater proportion of women in all groups work outside the home. This is particularly true of mothers of small children. As many as 32 percent of the women with children under 6 years old worked sometime during 1958. This compares with 46 percent for women with no preschool-age children. However, only 16 percent of the wives

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<sup>1</sup> This survey was taken in March 1959 as a supplement to the regular monthly Current Population Survey. An article entitled "Marital Status of Workers, 1959," also based on this survey, was issued as Special Labor Force Report No. 2, and appeared in the March 1960 issue of the Review. Earlier surveys on the marital and family characteristics of workers are summarized in the Bureau of the Census Current Population Reports, Series P-50, Nos. 5, 11, 23, 39, 44, 50, 62, 73, 76, 81, and 87. Additional related information can be found in Current Population Reports Series P-20.

Data presented here relate primarily to the civilian population of the continental United States 14 years of age and over, including inmates of institutions. Members of the Armed Forces living off post or with their families on post (1,007,000 in March 1959) are also included, but all other members of the Armed Forces are excluded. For simplicity this population is called the "civilian population" in this report.

<sup>2</sup> References to "wives," "married women," and "husbands" relate to those living in the same household as their spouse, unless otherwise stated.

<sup>3</sup> Labor force as a percent of civilian population.



with small children who worked during the year had a full-time job for 50 weeks or more—as against 39 percent for the other wives.

Whether or not a mother is able to take a job depends in part on the arrangements she can make for the care of her children. Information was tabulated in the 1959 survey for the first time on the number of adult female relatives living with the family, in order to determine the effect on the wife's labor force activity. According to these data, in about one out of every eight families headed by a husband, there was at least one female relative of age 18 or older (table 4). The proportion was more than twice as large in families with no children under 18 years of age or with children 6 to 17 years only as it was in families with children under 6 years of age. Families with young children are not likely to have grown daughters and apparently few have grandmothers or aunts living with them.

The relationship between the presence of an adult female relative in the family and the work status of the wife varied among different types of families. In families with preschool-age children, the wife was more likely to be working when a female relative was present. On the other hand, the labor force participation rates of wives with children of school age only were not significantly higher when female relatives were living in the family, whether or not these relatives worked or remained at home. Apparently many such working mothers were able to make other arrangements for child care or their children took care of themselves.<sup>4</sup> Also, some of the adult female relatives living with the family are elderly women who themselves require attention and care. Responsibility for dependent older relatives is probably the explanation for the fact that in families without children under 18, the labor force participation rate of wives was actually lower when female relatives were in the home.

**Husband's Income and Employment.** Another important factor influencing the wife's work activity outside the home is her husband's income.

<sup>4</sup> For information on child care arrangements made by mothers who work full time, see Child Care Arrangement of Full-Time Working Mothers (U.S. Department of Health, Education, and Welfare, Children's Bureau Publication, No. 378, 1959).

As a rule, a wife is less likely to work if her husband's income is high, particularly if there are also children in the family. (See table 5.) However, the role that the husband's income plays in the wife's labor force activity has changed somewhat in recent years. Limited data for earlier years show that the great majority of married women who worked were women from low-income families who worked as a matter of economic necessity. Many were Negro women and many were employed in farm work, in private household work, and in other poorly paying occupations. In recent years, we have seen a remarkable increase in the number of working wives from all income classes. Economic necessity, of course, continues to be a major reason why wives work. However, many wives today are from middle and upper classes and work for other reasons, such as raising the family's standard of living or achieving personal satisfaction and fulfillment.

Between 1951 and 1959, the labor force participation rates of wives rose in all income classes. Apparently the greatest increases occurred among

TABLE 1. LABOR FORCE STATUS OF MARRIED WOMEN, HUSBAND PRESENT, BY PRESENCE AND AGE OF CHILDREN, 1948-59

Date of survey	Total	No children under 18 years	Children 6 to 17 years only	Children under 6 years		
				Total	No children 6 to 17 years	Children 6 to 17 years
Number in labor force (in thousands)						
March 1959.....	12,205	5,679	4,055	2,471	1,118	1,353
March 1958.....	11,826	5,713	3,714	2,399	1,122	1,277
March 1957.....	11,529	5,805	3,517	2,208	961	1,247
March 1956.....	11,126	5,694	3,384	2,048	971	1,077
April 1955.....	10,423	5,227	3,183	2,012	927	1,086
April 1954.....	9,923	5,096	3,019	1,808	883	925
April 1953.....	9,763	5,130	2,749	1,884	1,047	837
April 1952.....	9,222	5,042	2,492	1,688	916	772
April 1951.....	9,086	5,016	2,400	1,670	886	784
March 1950.....	8,550	4,946	2,305	1,399	748	651
April 1949.....	7,959	4,544	2,130	1,285	654	631
April 1948.....	7,545	4,394	1,929	1,222	592	630
Percent of civilian population in labor force						
March 1959.....	30.9	35.2	39.8	18.7	18.3	19.0
March 1958.....	30.2	35.4	37.6	18.2	18.4	18.1
March 1957.....	29.6	35.6	36.6	17.0	15.9	17.9
March 1956.....	29.0	35.3	36.4	15.9	15.6	16.1
April 1955.....	27.7	32.7	34.7	16.2	15.1	17.3
April 1954.....	26.6	31.6	33.2	14.9	14.3	15.5
April 1953.....	26.3	31.2	32.2	15.5	15.8	15.2
April 1952.....	25.3	30.9	31.1	13.9	13.7	14.1
April 1951.....	25.2	31.0	30.3	14.0	13.6	14.6
March 1950.....	23.8	30.3	28.3	11.9	11.2	12.6
April 1949.....	22.5	28.7	27.3	11.0	10.0	12.2
April 1948.....	22.0	28.4	26.0	10.7	9.2	12.7

NOTE: Because of rounding, sums of individual items may not equal totals.

wives of men with higher income.<sup>5</sup> This trend is consistent with the sharp rise in labor force participation in recent years among wives 35 to 54 years old—an age when the husband's earnings are generally at a peak.

Some indication of the tie between the work activity of married women and husband's income is also provided by data on husband's occupation. Despite some important exceptions, wives whose husbands are in better paid occupations have less of a tendency to be in the labor force than wives of men in low-paid occupations. For example, in March 1959, wives of managers, craftsmen, and self-employed professionals had smaller labor force participation rates than wives of salesmen, operatives, service workers, and nonfarm laborers. (See table 6.) One of the major exceptions to this pattern is wives of proprietors; the average income of these husbands was comparatively high, but a large proportion of the wives worked because their assistance was needed in the family business. Also, the relatively high participation rates for wives of salaried professional and clerical workers in view of husband's income probably reflects a rather high educational level for these women. In the case of farm wives, labor force activity in March is low for seasonal reasons;

TABLE 2. LABOR FORCE STATUS OF MARRIED WOMEN, HUSBAND PRESENT, BY AGE AND PRESENCE AND AGE OF CHILDREN, MARCH 1959

Age of women and presence and age of children	Civilian population (thousands)	Labor force	
		Number (thousands)	Percent of population
Total.....	39,529	12,205	30.9
No children under 18 years.....	16,113	5,679	35.2
14 to 34 years.....	2,421	1,481	61.2
14 to 24 years.....	1,352	782	57.8
25 to 34 years.....	1,069	699	65.4
35 years and over.....	18,692	4,198	30.7
35 to 44 years.....	1,840	1,045	56.8
45 years and over.....	11,852	3,153	26.6
45 to 54 years.....	4,375	1,888	43.2
55 years and over.....	7,477	1,265	16.9
Children 6 to 17 years only.....	10,200	4,055	39.8
14 to 34 years.....	1,878	823	43.8
35 years and over.....	8,322	3,232	38.8
35 to 44 years.....	4,948	1,999	40.4
45 years and over.....	3,374	1,233	36.5
Children under 6 years, none under 3 years.....	4,598	1,130	24.7
14 to 34 years.....	2,759	697	25.3
35 years and over.....	1,839	433	23.9
Children under 3 years.....	8,648	1,341	15.5
14 to 34 years.....	7,047	1,088	15.4
14 to 24 years.....	2,660	436	16.4
25 to 34 years.....	4,387	652	14.9
35 years and over.....	1,601	253	15.8

NOTE: Because of rounding, sums of individual items may not equal totals.

TABLE 3. PERCENT DISTRIBUTION AND LABOR FORCE PARTICIPATION RATES<sup>1</sup> OF MARRIED WOMEN, HUSBAND PRESENT, BY PRESENCE AND AGE OF CHILDREN, MARCH 1959

Presence and age of children	Percent distribution		Percent of civilian population in labor force
	Wives in labor force	Wives not in labor force	
Total.....	100.0	100.0	30.9
No children under 18 years.....	46.5	38.2	35.2
Children 6 to 17 years only.....	33.2	22.5	39.8
12 to 17 years.....	15.4	8.6	44.5
6 to 11 years.....	8.7	6.6	37.2
12 to 17 and 6 to 11 years.....	9.1	7.3	35.8
Children under 6 years only.....	9.1	18.3	15.3
3 to 5 years.....	2.6	3.2	26.5
Under 3 years.....	4.3	8.9	17.9
3 to 5 and under 3 years.....	2.3	6.2	13.9
Children 6 to 17 and under 6 years.....	11.1	21.0	19.0
12 to 17 years and—			
Under 6 years.....	1.1	1.8	22.0
3 to 5 years.....	.7	1.0	23.7
Under 3 years.....	.3	.6	18.6
3 to 5 and under 3 years.....	.1	.2	( <sup>2</sup> )
6 to 11 years and—			
Under 6 years.....	6.5	13.6	17.5
3 to 5 years.....	3.9	5.8	23.4
Under 3 years.....	1.2	3.0	15.1
3 to 5 and under 3 years.....	1.3	4.9	11.0
12 to 17 and 6 to 11 years and—			
Under 6 years.....	3.5	5.7	21.7
3 to 5 years.....	2.1	2.7	25.8
Under 3 years.....	.8	1.5	19.8
3 to 5 and under 3 years.....	.6	1.5	15.3

<sup>1</sup> Labor force as a percent of civilian population.

<sup>2</sup> Percent not shown where base is less than 100,000.

NOTE: Because of rounding, sums of individual items may not equal totals.

moreover, money income may not be a full measure of the family's economic level.

Furthermore, occupational information illustrates the rapidly rising participation rates for wives of men with higher income. In the short period between 1956 and 1959, the rates for wives of self-employed professionals and proprietors rose by nearly 6 percentage points and that for wives of salaried professionals increased by 4 points. Rates were unchanged over this period for wives of men who were service workers, nonfarm laborers, and farmers—groups which are at the bottom of the money income scale.

The extent to which married women work is also somewhat related to the regularity of their husband's employment. In March 1959, 39.6 percent of wives of unemployed men were in the labor force, compared with 32.3 percent of wives

<sup>3</sup> This conclusion was tested by rearranging the data for 20- to 44-year-old wives into what may be more meaningful income groupings for the purpose of comparison, namely income quintiles. The results also indicate that the increase in the top income class was somewhat greater than in other classes. In addition, the data show that the gain in participation rates in the top quintile would have been even greater relative to other groups if each income class had had the same distribution of children as obtained in 1951.

whose husbands were employed. In families where the husband worked less than a full year in 1958 because of unemployment, 46 percent of the wives worked at some time during the year; where the husband worked the year round, 42 percent of the wives worked (table 7). Moreover, a larger proportion of the wives of unemployed men had full-time jobs, but a relatively smaller number of those who worked full time did so for a full year. Some of them undoubtedly took jobs only for the duration of the husband's unemployment. The higher proportion with work experience among wives of jobless workers also reflects the fact that many of these men are unskilled workers and many are Negroes—two groups whose wives have rather high labor force participation rates.

In families where the husband had not worked at all during the year, less than one-fourth of the wives worked. However, this low proportion is primarily the result of the age composition of the group, since most of these husbands and wives are older persons of retirement age.

**Education.** Another basic factor relating to the labor force activity of married women is their education. Wives with better education have considerably higher labor force participation rates than other wives except in higher income families with children of minor age. This difference

TABLE 4. LABOR FORCE STATUS OF WIVES BY PRESENCE OF FEMALE RELATIVES 18 YEARS OF AGE AND OVER AND PRESENCE AND AGE OF CHILDREN, MARCH 1959

Presence and age of children	All husband-wife families	No female relatives	1 or more female relatives		
			Total	All in labor force	1 or more not in labor force
Percent distribution of families					
Total.....	100.0	88.1	11.9	5.0	6.9
No children under 18 years..	100.0	86.0	14.0	6.3	7.8
Children 6 to 17 years only..	100.0	84.0	16.0	6.9	9.2
Children under 6 years.....	100.0	93.9	6.1	2.1	4.1
Percent of wives in labor force					
Total.....	30.8	30.4	33.4	32.0	34.5
No children under 18 years..	35.1	36.2	28.4	26.4	30.1
Children 6 to 17 years only..	39.8	39.3	42.4	41.8	43.0
Children under 6 years.....	18.5	17.8	29.0	27.1	30.0

NOTE: Because of rounding, sums of individual items may not equal totals.

TABLE 5. LABOR FORCE PARTICIPATION RATES<sup>1</sup> OF MARRIED WOMEN, HUSBAND PRESENT, BY PRESENCE AND AGE OF CHILDREN, MARCH 1959 AND APRIL 1951, AND INCOME OF HUSBAND IN 1958 AND 1950

Survey date and income of husband	All wives 14 years and over	Wives 20 to 44 years			
		Total	No children under 18 years	Children 6 to 17 years only	Children under 6 years
MARCH 1959					
Total .....	30.9	31.8	61.3	41.5	18.4
Under \$1,000 .....	32.1	43.1	67.0	57.5	21.5
\$1,000 to \$1,999 .....	31.1	42.1	65.5	52.2	28.5
\$2,000 to \$2,999 .....	34.8	38.3	58.9	49.1	26.1
\$3,000 to \$4,999 .....	34.8	35.4	66.0	45.8	21.0
\$5,000 to \$9,999 .....	28.0	28.1	59.4	40.6	14.7
\$10,000 and over .....	23.6	21.6	50.0	29.6	10.7
	14.9	16.3	34.5	23.1	7.6
APRIL 1951					
Total .....	25.2	28.1	52.9	33.1	14.4
Under \$1,000 .....	28.2	37.2	55.2	42.8	20.7
\$1,000 to \$1,999 .....	29.2	35.2	55.4	42.1	20.8
\$2,000 to \$2,999 .....	28.3	32.2	59.1	41.3	15.5
\$3,000 to \$4,999 .....	24.6	26.5	52.4	32.7	13.0
\$5,000 to \$9,999 .....	15.7	14.8	29.7	17.5	7.9
\$10,000 to \$9,999 .....	7.3	5.3	(7)	4.3	5.1
\$7,000 and over .....	11.8	10.6	(9)	11.4	8.4

<sup>1</sup> Labor force as a percent of civilian population.

<sup>2</sup> Percent not shown where base is less than 133,000.

appears to have widened in recent years. Better educated wives are more qualified for the rapidly expanding number of office and professional jobs. Moreover, having had more preparation before marriage for a work career, they have a stronger motivation to pursue a vocation after marriage when the family situation permits.

The relationship between the wife's education and her propensity to work is illustrated in table 8. It shows, for example, that in the \$3,000 to \$6,000 income class, the proportion of white wives in the labor force in March was approximately twice as great for those with some college education as for those who had never gone to high school, regardless of the child status of the family. Only in the case of wives with children under 18 years of age and husbands with incomes of \$6,000 or more was the effect of education not significant.<sup>6</sup>

In March 1959, as in the spring of other years, married women living on farms had a somewhat lower rate of labor force participation than other women (table 9). However, related data from the monthly labor force survey suggest that the differences would be insignificant on an annual

<sup>6</sup> For further information on this subject, see Educational Attainment of Workers (in Monthly Labor Review, February 1960, pp. 113-122, and issued as BLS Special Labor Force Report No. 1).

TABLE 6. LABOR FORCE PARTICIPATION RATES OF MARRIED WOMEN, HUSBAND PRESENT, BY MAJOR OCCUPATION GROUP OF EMPLOYED HUSBAND, MARCH 1959 AND 1956, AND MEDIAN INCOME OF EMPLOYED MEN IN 1958 AND 1955

Major occupation group of husband in March	Percent of wives in labor force, March 1959	Median income in 1958 <sup>1</sup> of all men in occupation group	Percent of wives in labor force, March 1956	Median income in 1955 <sup>1</sup> of all men in occupation group
Total employed.....	32.3	\$4,344	29.9	\$3,797
Professional, technical, and kindred workers.....	30.3	\$6,393	26.0	\$5,429
Self-employed workers.....	25.1	10,366	19.4	8,338
Salaried workers.....	31.3	6,178	27.4	5,269
Farmers and farm managers.....	28.5	1,904	28.2	1,283
Managers, officials, and proprietors, except farm.....	32.4	5,855	29.4	5,228
Self-employed workers.....	37.9	5,071	32.4	4,532
Salaried workers.....	26.7	6,580	25.7	5,712
Clerical and kindred workers.....	37.9	4,555	34.0	3,950
Sales workers.....	33.9	4,464	32.2	4,472
Craftsmen, foremen, and kindred workers.....	29.4	5,108	27.4	4,425
Operatives and kindred workers.....	35.0	4,083	32.1	3,695
Service workers.....	37.4	2,332	37.7	2,036
Farm laborers and foremen.....	28.6	881	26.2	1,039
Laborers, except farm and mine.....	31.6	2,877	31.8	2,599

<sup>1</sup> Median income based on persons with income.<sup>2</sup> Excludes income of private household members which is included in total.

SOURCE: Income data from U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 33, table 28 and P-60, No. 23, table 5.

basis. Agricultural employment of married women in March was about one-quarter million below the annual average. Nonagricultural employment of married women, on the other hand, was about the same in March as for the annual average. The greater annual farm employment implies an annual labor force participation rate for married women living on farms which would equal the rate for rural nonfarm and almost equal the rate for urban married women.

Wives—both white and nonwhite—in urban areas of the South were more likely to be in the labor force than wives in urban areas in the rest of the country, irrespective of the child status of the family. The difference was greatest among non-white mothers of preschool children.

*Occupation.* Since married women tend to have educational and social backgrounds similar to their husbands, a sizable proportion of working wives are in the same broad occupation group as their spouses. Obviously, some occupations in which men work, such as craftsmen and nonfarm laborers, offer almost no job opportunities for women. But in March 1959, 40 percent of employed wives whose husbands were in professional, clerical, and service jobs were working in the same occupation group. (See table 10.) As would be expected, an unusually large proportion (48 percent) of employed women married to farmers and farm laborers were also in farm work. Another example is that of wives whose husbands were elementary or secondary school teachers. Nearly half of these

TABLE 7. WORK EXPERIENCE IN 1958 OF MARRIED WOMEN, HUSBAND PRESENT, BY WORK EXPERIENCE IN 1958 OF HUSBAND, MARCH 1959

Work experience of husband	Percent of wives with work experience <sup>1</sup>	Percent distribution of wives with work experience						
		Total	Full time <sup>2</sup>				Part time <sup>3</sup>	
			Total	50 to 52 weeks	27 to 49 weeks	1 to 26 weeks	Total	27 weeks or more
Total.....	41.5	100.0	66.4	33.0	16.0	17.4	33.6	19.1
Worked during the year.....	43.2	100.0	66.5	32.8	16.1	17.6	33.5	19.1
Year-round worker.....	42.1	100.0	64.8	35.2	14.5	15.1	35.2	21.6
Full time.....	42.1	100.0	65.3	35.5	14.6	15.2	34.7	21.3
Part time.....	43.0	100.0	52.0	28.9	10.5	12.5	48.0	25.3
Part-year worker.....	46.5	100.0	71.3	36.3	20.4	24.5	28.7	12.2
27 to 49 weeks.....	46.6	100.0	71.1	24.9	21.0	25.2	28.9	12.0
With unemployment.....	46.2	100.0	73.8	24.2	21.5	28.1	29.2	10.1
1 to 26 weeks.....	46.3	100.0	71.6	29.6	19.1	23.0	28.4	12.6
With unemployment.....	46.6	100.0	71.3	28.2	19.0	24.1	28.7	11.8
Did not work during the year.....	23.6	100.0	64.7	36.6	13.9	14.1	35.3	20.9

<sup>1</sup> Relates to civilian noninstitutional population.<sup>2</sup> Worked 35 hours or more per week during a majority of the weeks worked.<sup>3</sup> Worked less than 35 hours per week during a majority of the weeks worked.

NOTE: Because of rounding, sums of individual items may not equal totals.



TABLE 8. PERCENT OF WHITE WIVES<sup>1</sup> IN THE LABOR FORCE, BY EDUCATION, INCOME OF HUSBAND IN 1958, AND PRESENCE AND AGE OF CHILDREN, MARCH 1959

Income of husband and presence and age of children	Education of wife		
	Elementary, 1 to 8 years	High school, 1 to 4 years	Some college
All income classes.....	23.5	31.6	35.4
No children under 18 years.....	22.6	43.0	46.2
Children 6 to 17 years only.....	33.4	40.6	42.6
Children under 6 years.....	14.1	17.6	20.5
Under \$3,000.....	22.4	38.7	50.9
No children under 18 years.....	19.3	41.5	49.7
Children 6 to 17 years only.....	39.1	54.3	(7)
Children under 6 years.....	17.4	25.3	(7)
\$3,000 to \$5,999.....	26.0	34.1	45.6
No children under 18 years.....	29.0	49.4	55.1
Children 6 to 17 years only.....	31.2	45.8	60.8
Children under 6 years.....	12.7	18.1	27.7
\$6,000 and over.....	18.5	23.3	23.9
No children under 18 years.....	16.7	34.0	34.7
Children 6 to 17 years only.....	27.2	28.3	30.8
Children under 6 years.....	(7)	11.2	11.8

<sup>1</sup> Husband-wife families.<sup>2</sup> Percent not shown where base is less than 133,000.

employed wives were in this same occupation, although only 6 percent of all employed wives were in this vocation.

Nearly 6 out of 10 employed young married women with no children were in clerical occupations in March 1959. Most of the girls who go to work after high school graduation find employment in clerical jobs,<sup>7</sup> and most of those who continue to work in the early years of marriage apparently remain in this occupation. The proportion in clerical jobs was only half as great for young mothers with children under 3 years, probably because they could not easily take a job requiring a full-time schedule. Only one-fourth as large a proportion of the women 55 years old and over with no children of minor age were in clerical work. These older wives, many of whom lacked comparable educational preparation, were more likely to be in sales and service occupations, and since more of them lived in agricultural areas, they were more apt to be in farm work. Also, a greater proportion of older wives, with more work experience, were managers and proprietors.

<sup>7</sup> About 60 percent of all girls graduated in June 1959 and employed in October 1959 were in clerical jobs. See Employment of June 1959 High School Graduates, October 1959 (in Monthly Labor Review, May 1960, pp. 500-506 and issued as BLS Special Labor Force Report No. 5).

<sup>8</sup> About 95 percent of all nonwhite women are Negroes.

<sup>9</sup> Although Negro and white wives living on farms have about the same participation rates in March, their average rates for the year rise to a higher level and that for the Negro wives more so than for white wives.

*Negro and White Women.* The overall rate of labor force participation for Negro women has remained relatively stable through the years, while the rate for white women has climbed rapidly. The stability in the rate for Negro women reflects declines for those in the oldest and youngest ages balancing increases for those in other age groups. Similarly, labor force data for nonwhite<sup>8</sup> women by marital status show a rise during the past decade in the labor force participation rate for married women and a decline for younger single women.

Negro wives are much more likely to be in the labor force than white wives, irrespective of residence<sup>9</sup> or the presence and age of children. This is also true when account is taken of husband's income, although the difference narrows somewhat in higher income brackets. Rates of labor force participation are also higher for Negro women in the group who are widowed, divorced, and separated with no minor children in the family (table 11). However, when there are children to be supported in these husbandless families, the proportion of white mothers who work is just as high as for nonwhite mothers. Labor force activity is much greater among mothers who are widowed,

TABLE 9. LABOR FORCE STATUS OF MARRIED WOMEN, HUSBAND PRESENT, BY RESIDENCE AND PRESENCE AND AGE OF CHILDREN, MARCH 1959

Labor force status and presence and age of children	United States, total	Urban	Rural nonfarm	Rural farm
Percent of wives in labor force				
Total.....	30.9	32.2	29.9	26.5
No children under 18 years.....	35.2	37.0	35.1	26.3
Children 6 to 17 years only.....	39.8	40.2	40.8	35.7
Children under 6 years.....	18.7	18.9	18.3	18.4
None under 3 years.....	24.7	24.4	25.1	25.7
Some under 3 years.....	15.5	16.2	14.6	14.4
Percent distribution of wives				
Labor force.....	100.0	100.0	100.0	100.0
No children under 18 years.....	46.5	50.1	40.0	41.8
Children 6 to 17 years only.....	33.2	31.6	35.7	36.9
Children under 6 years.....	30.3	18.3	24.3	21.3
None under 3 years.....	9.3	7.9	11.8	10.8
Some under 3 years.....	11.0	10.4	12.6	10.6
Not in labor force.....	100.0	100.0	100.0	100.0
No children under 18 years.....	38.2	40.6	31.6	42.2
Children 6 to 17 years only.....	22.5	22.3	22.2	23.9
Children under 6 years.....	36.3	37.1	46.3	34.0
None under 3 years.....	12.6	11.7	15.1	11.3
Some under 3 years.....	26.7	25.4	31.2	22.7

NOTE: Because of rounding, sums of individual items may not equal totals.

TABLE 10. OCCUPATION GROUP OF EMPLOYED MARRIED WOMEN, HUSBAND PRESENT, BY OCCUPATION GROUP OF EMPLOYED HUSBAND, MARCH 1959

Occupation group of husband	Total employed wives (thousands)	Occupation group of employed wives									
		Total	Professional and technical workers	Farm occupations <sup>1</sup>	Managers, officials, and proprietors, except farm	Clerical workers	Sales workers	Crafts- men and foremen	Operatives	Service workers, including private household	Laborers, excluding farm and mine
Total employed.....	10,092	100.0	12.8	4.7	6.0	28.7	8.9	1.2	18.0	19.3	0.4
Professional and technical workers.....	1,046	100.0	39.4	1.0	5.2	36.8	4.1	1.0	4.7	7.7	.....
Farm occupations <sup>1</sup> .....	800	100.0	9.9	48.4	2.4	6.1	3.5	.5	11.5	17.6	0.1
Managers, officials, and proprietors, except farm.....	1,642	100.0	12.0	.2	17.0	35.0	15.4	1.0	8.7	10.1	.7
Clerical workers.....	731	100.0	13.1	1.0	3.8	41.3	10.4	1.2	15.6	13.0	.7
Sales workers.....	649	100.0	16.0	.5	7.2	38.2	16.9	2.0	8.2	10.8	.3
Craftsmen and foremen.....	1,929	100.0	10.3	.6	3.4	30.4	10.1	1.8	22.0	21.2	.2
Operatives.....	2,047	100.0	5.8	1.1	3.8	25.0	6.8	1.0	33.7	22.3	.5
Service workers, including private household.....	625	100.0	10.2	.6	3.8	21.9	4.8	.5	18.2	39.6	.3
Laborers, excluding farm and mine.....	624	100.0	4.0	3.8	2.4	16.2	4.5	1.4	22.4	44.6	.6

<sup>1</sup> Includes farmers and farm managers, laborers, and foremen.

NOTE: Because of rounding, sums of individual items may not equal totals.

divorced, or separated than among those with husbands present as the principal breadwinner, and the difference is most marked among white women.

### Family Heads and Family Work Patterns

The problem of unemployment is particularly important when it hits men who are heads of families and have the primary responsibility for the family welfare. Under these circumstances, the employment status of other persons in the family also takes on an added significance. In March 1959, the number of unemployed heads of husband-wife families was 1.5 million. This represented an unemployment rate of 4.3 percent, noticeably below the rate of 6.1 percent a year earlier during the worst part of the recession. In half of these families, the wife or some other family member was in the labor force but in only two-fifths of them was someone employed. (See table 12.) This suggests that when the primary family provider was unemployed, other persons in the family tried to find work to make up for lost income but that many had difficulty in locating a job. This difficulty could very well reflect a general scarcity of work in the particular geographic area.

In families where the head was employed, the proportion with a member other than the head in the labor force was somewhat lower than in families with unemployed heads but the proportion with an employed secondary worker was the same.

Only one-third of the husband-wife families whose head was not in the labor force had some family member in the labor force. Most of these husbands were older men of retirement age whose wives were also of advanced age.

The additional family member in the labor force is usually the wife rather than another relative, primarily reflecting the fact that in two out of three husband-wife families there are no other persons of working age besides the husband and wife. In March 1959, the wife was in the labor force in 31 percent of the husband-wife families, or twice the proportion of families with other relatives in the labor force. This difference was more striking where the husband was unemployed, but there was no difference where the husband was not in the labor force. Most of the women in the latter group, as mentioned earlier, are older wives of men in retirement ages, while the sons

TABLE 11. LABOR FORCE PARTICIPATION RATES<sup>1</sup> OF EVER-MARRIED WOMEN, URBAN AND RURAL NONFARM, BY MARITAL STATUS, COLOR, AND PRESENCE AND AGE OF CHILDREN, MARCH 1959

Marital status and color	Total	No children under 18 years	Children 6 to 17 years only	Children under 6 years
Married women, husband present.....	31.5	36.4	40.5	18.7
White.....	30.4	35.1	39.4	17.7
Nonwhite.....	44.8	53.3	55.4	30.2
Other ever-married women <sup>1</sup> .....	42.4	38.1	68.7	45.9
White.....	39.0	35.4	69.2	45.7
Nonwhite.....	54.3	54.1	66.5	46.2

<sup>1</sup> Labor force as a percent of civilian population.<sup>2</sup> Includes widowed, divorced, and separated women.

TABLE 12. EMPLOYMENT STATUS OF FAMILY HEADS AND OTHER FAMILY MEMBERS, MARCH 1959

[Number of persons in thousands]

Type of family and employment status of family members other than head	Family head						
	Civilian population	Labor force					Not in labor force
		Total		Employed <sup>1</sup>	Unemployed		
		Number	Percent of population		Number	Percent of labor force	
ALL FAMILIES							
Total: Number.....	44,202	37,722	85.3	35,024	1,698	4.5	6,480
Percent.....	100.0	100.0		100.0	100.0		100.0
Some other family member in labor force.....	43.5	43.9	86.1	43.6	49.5	5.1	41.4
Some other family member employed <sup>2</sup> .....	40.0	40.4	86.3	40.4	40.0	4.4	37.5
No other family member in labor force.....	56.5	56.1	84.8	56.4	50.5	4.0	58.6
HUSBAND-WIFE FAMILIES							
Total: Number.....	38,585	34,625	89.7	33,149	1,477	4.3	3,960
Percent.....	100.0	100.0		100.0	100.0		100.0
Some other family member in labor force.....	42.4	43.3	91.7	43.1	49.0	4.8	34.2
Some other family member employed <sup>2</sup> .....	39.3	40.1	91.8	40.1	40.8	4.3	31.5
No other family member in labor force.....	57.6	56.7	88.3	56.9	51.0	3.8	65.8
OTHER FAMILIES WITH MALE HEAD							
Total: Number.....	1,285	922	71.8	845	77	8.4	364
Percent.....	100.0	100.0		100.0	100.0		100.0
Some other family member in labor force.....	57.9	55.7	68.8	55.9	(9)	8.2	63.6
Some other family member employed <sup>2</sup> .....	50.3	48.5	69.0	49.8	(9)	6.1	54.8
No other family member in labor force.....	42.1	44.3	75.4	44.1	(9)	8.8	36.4
FAMILIES WITH FEMALE HEAD							
Total: Number.....	4,332	2,175	50.2	2,080	144	6.6	2,157
Percent.....	100.0	100.0		100.0	100.0		100.0
Some other family member in labor force.....	49.4	47.8	48.6	47.5	52.8	7.2	51.0
Some other family member employed <sup>2</sup> .....	43.3	41.3	47.8	41.8	34.5	5.5	45.4
No other family member in labor force.....	50.6	52.2	51.8	52.5	47.2	5.9	49.0

<sup>1</sup> Includes members of the Armed Forces living off post or with their families on post.<sup>2</sup> Includes families with 1 or more members employed regardless of the employment status of other members.<sup>3</sup> Percent not shown where base is less than 100,000.

NOTE: Because of rounding, sums of individual items may not equal totals.

and daughters in these families are for the most part in their prime working years.

While most families have both a husband and wife present, a substantial proportion (5.6 million out of 44.2 million in March 1959) have a head who is widowed, divorced, or separated, or was never married. Most of these family heads are older people and most of them are women. Their employment pattern, therefore, is quite different from that of husbands who are heads of families. Specifically, a greater proportion of these "other family heads" are not in the labor force and those in the labor force are more likely to be part-time workers or unemployed. However, the female heads have considerably higher labor force participation rates than married women who have husbands to assume the main financial responsibility for the family.

Relatively more of these "broken" families have members other than the head in the labor force,

since they are more likely to include grown sons and daughters or other adult relatives. Moreover, these other family members may have a greater motivation to enter the labor force to bolster family income.

*Earnings of Family Members.* The average (median) income of wives with income in 1958 was about \$1,200 and that of other family members was \$900; these compare with an average of \$4,400 for husbands. (See table 13.) For the secondary workers who worked full time the year round, average incomes were about \$3,000, as against \$5,200 for husbands with the same amount of work experience during the year.

The importance to family income of the wife's work activity and income is illustrated by the fact that in families with income of \$7,000 to \$15,000 fully half of the wives worked sometime in 1958 and half of these who worked had full-time jobs

TABLE 13. MEDIAN TOTAL MONEY INCOME IN 1958 AND 1948 OF RELATED FAMILY MEMBERS, MARCH 1959 AND APRIL 1949

Relationship to head	Persons with income in 1958			Persons with income in 1948			Percent change 1948 to 1958	
	Number (thousands)	Percent of civilian population	Median income <sup>1</sup>	Number (thousands)	Percent of civilian population	Median income <sup>1</sup>	Persons with income	Median income
Head of family--male, married, wife present.....	38,337	96.4	\$4,402	33,084	98.6	\$2,766	15.9	59.1
Wife of head.....	16,446	42.6	1,194	9,577	28.6	931	71.7	28.2
Relative of head: <sup>2</sup>								
Male.....	9,791	69.1	989	9,631	68.8	1,317	1.7	-24.9
Female.....	7,342	53.8	701	6,737	47.9	1,096	9.0	-36.0

<sup>1</sup> Median income based on persons with income.<sup>2</sup> Includes relatives of all family heads.

SOURCE: Derived from U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 33, table 25 and No. 6, table 13.

the year round. In contrast, in families with incomes of less than \$7,000, two-fifths of the wives worked, of whom only one-fourth were regular full-time workers. The average (median) percent of family income accounted for by wives' earnings was 39 for wives who worked full time the year round, but only 6 percent for wives who worked full time less than half a year or usually worked part time.

Earnings of nonwhite wives in nonfarm areas constituted a slightly smaller part (20 percent) of family income than earnings of white wives (24 percent). However, a much larger proportion of nonwhite families were dependent on the wife's earnings, irrespective of family income. In nonwhite families with higher income, participation of the wife in the labor force was almost standard practice; for example, in nonfarm families with in-

comes of \$7,000 or more, approximately 80 percent of the nonwhite wives worked at some time during the year. The corresponding rate for white wives was about 50 percent.

In recent years, the secondary earner in the family has tended more frequently to be the wife rather than another family member. Sons and daughters are marrying and setting up their own households at an earlier age—in large part as a result of generally good economic conditions. Moreover, the proportion receiving income has increased much less for other family members than for wives, and their median income (an increasing part of which is probably social security benefits) has actually declined while that for wives has increased. At the same time, median income of wives has failed to rise as fast as the income of husbands.



# Summaries of Studies and Reports

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## The Economic Climate of Collective Bargaining

EDITOR'S NOTE.—*The following article is an excerpt of an address by Ewan Clague, Commissioner of Labor Statistics, before the New York University Thirteenth Annual Conference on Labor, on May 12, 1960. Minor word changes have been made and omissions from the text are not indicated.*

COLLECTIVE BARGAINING has always been influenced to a marked extent by the economic climate in which it takes place. But this fact has been obscured for the past 20 years because the prevailing economic conditions have been largely those of wartime controls, postwar inflation, or peacetime prosperity. Business recessions have been short and comparatively shallow—neither deep enough nor long enough to undermine basic confidence in the future.

In World War II and the later Korean conflict, the prevailing pressure from both business firms and unions was for price and wage increases. Restraint was imposed by Government, however, and was assisted by labor and management cooperation. Labor gave a no-strike pledge, management generally pledged itself to price control, and both labor and management served on Government wage control boards.

In periods of postwar inflation such as 1946–48 and 1955–57, the same tendencies were evident in a free market, that is, one without price or wage controls. The prevailing pattern was one of risk-taking, resulting in an upward spiral of wages and prices. In this connection it is pointless to debate whether wage increases cause price increases or price increases cause wage increases. It doesn't matter which comes first. If prices increase, there surely will be demands for wage increases; and if wages increase, employers are going to raise prices if they can.

Under such circumstances, collective bargaining cannot be expected to perform as a protector of the public or the consumer. The pressures and incentives are too strong. What employer will risk a strike over wage demands when he thinks he can recoup his profits by raising prices? Likewise, what union leader can agree to settle for no wage increase when the cost of living is going up and other workers—union and nonunion—are getting substantial wage increases? The problem of the bargainers in these economic conditions is to find the upper limit of increases. Strikes can and do take place at such times, but the settlements seldom result in price stability.

But wartime and peacetime prosperity have not always prevailed. We have experienced three definite business recessions since World War II—1949, 1954, and 1958 (to cite the bottom year in each case). What happened to wages and prices in those years? Was collective bargaining affected by the recessions? The answer is, Yes and No; Yes, in that the upward spiral was slowed down; No, in that there was no reversal of the trend.

### The Record Since World War II

In 1949, increases in wage rates in manufacturing were relatively infrequent and small, and straight-time average hourly earnings in manufacturing rose by less than 1 cent per hour (December 1948–December 1949), compared with 11 cents in 1948. Unemployment reached its recession peak (actual, not seasonally adjusted) in February 1950. Consumer prices also reached bottom in February. In the light of these conditions, collectively bargained wage increases in the first 3 months of 1950 continued to be comparatively modest. However, as business revival became more evident in succeeding months, the character of the settlements changed. Hourly earnings began to rise more rapidly. Straight-time average hourly earnings increased about 2 cents per hour between March and June, about

twice as much as during 1949. In May 1950, the annual improvement factor and cost-of-living escalator provisions of the General Motors agreement were renewed, and the annual improvement factor increased from 3 to 4 cents an hour.

The extent of the slowdown in 1949, however, is exaggerated by looking at trends in hourly earnings in manufacturing. In nonmanufacturing, wage rates increased considerably more than in manufacturing. Of the organized workers who received wage increases during 1949, more than 70 percent were in nonmanufacturing, predominantly in railroad transportation and construction.

Moreover, the emphasis in collective bargaining during 1949 shifted from wage-rate increases to changes in fringe benefits, where some costs are postponable. The real development of pension and insurance provisions in collective bargaining began in that year. Approximately 1.2 million organized workers were affected by agreements on new pension plans or on additional benefits under established plans, and a larger number acquired protection under new insurance plans or liberalized benefits under existing insurance plans. Other supplementary benefits such as longer paid vacations also figured prominently in 1949 settlements. Few settlements reached during the year failed to provide increases in either wage rates or fringe benefits or both.

In 1954, earnings also slowed down appreciably. During that year, straight-time average hourly earnings in manufacturing increased by 3 cents (1.7 percent), whereas the increases during 1953 (December 1952–December 1953) and 1955 (December 1954–December 1955) were 9 and 8 cents, respectively. The slowdown does not appear to have been as marked in changes in supplementary benefits. About two-thirds of all major collective bargaining in that year, as in most other recent years, changed one or more supplementary benefits.

With recovery, the year 1955 was one of widespread activity, the business revival being reflected both in the size of the settlements and in the relative rapidity with which some of them were reached. During that year, a number of long-term agreements were renegotiated, including those in the automobile, farm equipment, and trucking industries. The automobile settlements once again increased the size of the annual im-

provement increases (to 2½ percent or 6 cents per hour—up from 5 cents). Prompted by improved sales and anticipation of the \$1 minimum under the Fair Labor Standards Act in March 1956, many southern cotton-textile manufacturers raised their pay scales. Late in 1955, the midwestern shoe industry increased wage rates for the first time since 1952.

Wage changes were influenced much less by the recession of 1958 than during 1949 or 1954. The difference in wage developments during 1958 is traceable largely to two factors: (a) the behavior of the Consumer Price Index during the year and (b) the existence in many key bargaining situations of long-term agreements, adopted in earlier years, that provided for wage-rate increases to be effective during 1958. The Consumer Price Index rose quite sharply until the summer of 1958 and resulted in substantial wage increases for more than 4 million workers covered by cost-of-living escalator clauses. Moreover, it furnished labor with a strong cost-of-living argument at the bargaining table.

At the beginning of 1958 there were already in effect long-term wage agreements which specified improvement factor or other deferred wage increases for approximately 4 million workers in major collective bargaining situations. During 1958, basic steel workers received wage increases totaling about 18 cents an hour, divided equally between deferred wage increases and increases in cost-of-living allowances. In meatpacking, pay rose 15.5 cents—7.5 cents in deferred and 8 cents in cost-of-living increases.

Thus, while the general economic climate of 1958 might have slowed down the wage settlements, the effect of the escalators was to raise wages sharply under existing escalator contracts and to stimulate higher wage demands in new negotiations. The comparative stability of the Consumer Price Index from the summer of 1958 to the early spring of 1960 has slowed down the automatic wage increases in old settlements and has taken some of the pressure off the new negotiations. So the wage increases going into effect in 1959 were in general a little lower than in 1958. In the first quarter of 1960, there has been no sharp change in the rate at which wages are rising.

To summarize: In the 15 years since World War II, the record shows that during periods of

prosperity, expansion, and high employment both prices and wages rose sharply, while during the periodic recessions with business declines and substantial unemployment the only discernible effect was a slowing down of the increases but no interruption of the general trend. Is this pattern likely to continue in 1960 and beyond?

### The Outlook for the Early 1960's

The pattern of the 1950's is much less likely to repeat itself in full force during the next few years. This outlook is based on the assumption that there will not be an international crisis of major proportions. In the absence of such a crisis, the outlook is for a change in the economic climate.

First, we are on the threshold of a marked expansion in the Nation's labor force. There will be increasing numbers of young people entering the labor force during the next 5 years and a further sharp jump beginning in 1965 and continuing into the 1970's.

Second, there is evidence that industrial capacity is catching up with demand. Recall the shortage of nearly all consumer goods during the world price explosion of 1946-48. Consumer demand, supported by ample purchasing power, far exceeded industry's capacity to supply; so practically all prices soared. The recession of 1949 signaled the catching up of the supply of soft goods, but there were continuing shortages of consumer durables, including automobiles, while homebuilding rose substantially during the recession. During the conflict in Korea, new shortages developed. The tremendous automobile year of 1955 was partly the result of shortages created during the war. The boom of 1955-57 was in some senses a postwar boom after a small war.

But over the years, the gradual expansion of productive capacity has caught up with demand in many, if not practically all, industries. What industry today is operating at 100 percent of capacity? In fact, what industry is definitely short of capacity to meet any expansion of demand that is in sight? The steel industry, for example, suffered a 5-month strike in 1959, accompanied by near exhaustion of many steel inventory items.

Yet 5 months after the strike, the steel industry was operating at only about 75 percent of capacity. Many industries now have ample productive capacity for the present and the near future, at least.

Third, prices in many industries are showing the effects of this increased productive capacity. Two full years have passed since the bottom of the 1958 recession, yet the Wholesale Price Index of the Bureau of Labor Statistics is only 0.4 percent higher than it was in the spring of 1958. The farm products group has declined 7.5 percent, while the "all other" group has risen 2.5 percent. Note the contrast with the business recovery of 1955-57. In the 3 years from mid-1954 to mid-1957 (the peak of the boom), the Wholesale Price Index as a whole rose nearly 8 percent, and the "all other," over 10 percent.

Let us examine the price changes of some of the industries which sparked the 1955-57 boom. Starting with the 1954 lows, the metals and metal products group had risen nearly 15 percent by the end of 1955, and over 20 percent by the end of 1956. Today, by the spring of 1960, that group is only 1.4 percent higher. The machinery and motive products group displayed a similar pattern—prices up sharply by the end of 1957, but only 3.0 percent more by the spring of 1960. The rubber and rubber products group rose over 20 percent by the autumn of 1955, but today are no higher than they were over 4 years ago. In summary, there are no signs as yet that these important commodity groups are going to repeat the 1955-57 performance.

The Consumer Price Index is not very responsive to changes in business conditions. It lags both on business upturns and on downturns.<sup>1</sup> Now, in the spring of 1960, we are in about the same stage of business recovery as we were in the spring of 1956, which marked the beginning of a rise in the index of about 10 percent in the next 2 years. No such rise in the CPI now seems likely.

Fourth, collective bargaining has already begun to exhibit the effects of the outlook for business and prices. If businessmen cannot look forward with confidence to expanding production and rising prices, they are likely to display more resistance to labor demands. In the steel settlement last year, for example, a ceiling was placed

<sup>1</sup> For detailed analyses of the behavior of the Consumer Price Index in booms and recessions during the last 40 years, see *Monthly Labor Review*, June 1958, pp. 616-620, and June 1959, pp. 642-645.

on the cost-of-living escalator. The sharp increases in wages in the last contract due to this factor are no longer possible.

Managements are likewise taking a new look at the annual deferred wage increases, and this has led to a closer examination of the subject of productivity. Productivity can be expressed in two ways: output per man-hour of labor input or man-hours of labor input per unit of output. One is simply the reverse of the other. Employers tend to think in terms of the second—unit man-hours—since this, when related to wage rates, gives the labor cost per unit of output. Furthermore, the individual employer thinks of these data as relating to his own plant or firm.

So in 1959 there were a number of settlements in which joint studies of this productivity factor were provided for in the contract, namely, West Coast longshoring, steel, and Armour meatpacking contracts.<sup>2</sup> Although this idea is not entirely new, some of the implications of these contracts are of far-reaching importance. If price increases aren't feasible, then management must look to increased efficiency and lower labor costs to offset wage increases.

Labor, too, has a stake in productivity. In prosperous times of high employment, increasing output per man-hour implies at least the possibility of wage increases without price increases, the possibility of higher profits which might be shared with labor. In less prosperous times, when unemployment may be uncomfortably high and when business isn't expanding rapidly, labor's interest turns to job protection. That is the reason for the emphasis on retraining, reassignment, geographic shifting of employees, etc., in the contracts just mentioned.

Insofar as the present economic climate continues into the future without significant change, collective bargaining is likely to take on more, rather than less, of the characteristics of 1959. One cannot say that it will be "harder"; let us say that it will be more cautious, less risk-taking. Management will have to think more about costs than about price increases; labor will have to think more about protecting jobs than about the size of the wage increases. This will lead both sides to think of productivity, even though the two parties look at it from different points of view.

Such an approach will almost surely lead to a more intensive examination of individual firm and industry prospects and less of the general economic situation. In an expansionary, inflationary period, both parties tend to look outward to the economy as a whole. General economic conditions may in fact have more bearing on their negotiations than their own internal situation. But in a period of stability, the specific prospects of the firm and the industry become of paramount importance to both sides. Local interests dominate the thinking, and more particularized settlements often result. Differing economic philosophies have less influence in such negotiations. Hard economic facts count more.

It would be foolish to suggest that this should insure more peaceful settlements and fewer strikes. It could result in exactly the opposite. But on balance, the prevailing pattern is more likely to be one of give-and-take, of mutual accommodation to economic necessities.

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<sup>2</sup> For the text of the specific clauses in the contracts, see the Monthly Labor Review as follows: West Coast longshoring and Armour meatpacking—October 1959, pp. 1108-1110; steel—December 1959, p. 1346.



## Extension of Health Benefits to Prior Pensioners

**EDITOR'S NOTE.**—*The following article was prepared by the Bureau of Labor Statistics at the request of the Bureau of the Budget to assist it and the U.S. Congress in considering S. 2575, the Retired Federal Employees Health Benefits Act of 1960. "This bill . . . will provide former Federal employees retired prior to the effective date of the Health Benefits Act of 1959 . . . with a health benefits program patterned after . . . the program which becomes available on that date to present employees and future retirees."*

WHEN 112 major collectively bargained health and insurance plans made provision for the extension of health benefits to workers upon retirement, two-thirds (76) also extended coverage to employees who had already retired. In virtually every such instance, prior pensioners were to receive the same benefits and make the same contributions, if any, as future pensioners. The cost of the pensioners' benefits was to be paid by the employers in nearly half the plans, by the pensioners alone in a third of the plans, and by both groups in all but one of the remaining plans. All but 2 of the 76 plans providing for the coverage of prior pensioners extended health benefits to them at the same time as to future pensioners.

### Scope of Survey

For a series of bulletins on the features of health and insurance plans under collective bargaining,<sup>1</sup> the Bureau of Labor Statistics has been analyzing a sample of 300 large plans. These plans were selected to provide a broadly representative view of the type of protection provided under major plans, i.e., those covering 1,000 or more workers. Factors given primary consideration in the selection of the sample were industry and geographic location of plans, type of bargaining unit, and size of plan as measured by active worker coverage. The selected plans, which ranged in coverage to a half million workers, provided protection to 4,933,000 workers, or about 40 percent of the estimated number of workers under all collectively bargained health and insurance plans.<sup>2</sup>

To determine what provisions, if any, had been made for workers already retired (prior pensioners) when health benefits were extended to future pensioners, questionnaires were sent in February 1960 by the Bureau to the administrators of 112 plans in the BLS sample that had extended health benefits to retired workers. These included 107 plans known to provide hospital benefits for future pensioners in early 1959,<sup>3</sup> and 5 plans of aluminum and can companies which, in collective bargaining with the United Steelworkers in late 1959, had agreed for the first time to provide health benefits for pensioners.<sup>4</sup>

The worker coverage data in the accompanying tables refer, in all cases, to the number of active employees covered by the plans. The number of active employees, however, is not necessarily proportionate to the number of future and prior pensioners covered by each plan. Data on benefits and financing refer to the practice in effect at the time benefits were extended to prior pensioners.

### Benefits

Hospital benefits were extended to future pensioners by 112 of the 300 health and insurance plans studied.<sup>5</sup> About nine-tenths of these 112 plans also extended surgical benefits to pensioners and two-thirds provided medical benefits.<sup>6</sup>

Of the 112 plans, 76 reported that they also extended health benefits to prior pensioners (table 1).<sup>7</sup> About the same proportion of plans covered prior pensioners in manufacturing and nonmanufacturing industries. However, coverage of prior pensioners was more frequently

<sup>1</sup> See Health and Insurance Plans Under Collective Bargaining: Accident and Sickness Benefits, Fall 1958 (BLS Bull. 1250, 1959); Hospital Benefits, Early 1959 (BLS Bull. 1274, 1960); and Surgical and Medical Benefits, Late Summer 1959 (BLS Bull. 1280, 1960). These bulletins were summarized in the June 1959 and February, June, and July, 1960 issues of the Monthly Labor Review, respectively.

<sup>2</sup> See BLS Bull. 1274, op. cit., tables 1 and 2.

<sup>3</sup> Seven plans which provided hospital benefits for future pensioners for only a limited period of time (for 1 year under 6 plans and for 2 months to 3 years under the 7th plan) were excluded.

<sup>4</sup> Although the major steel companies had agreed in January 1960 to provide conversion rights to future pensioners and to deduct premiums from pension checks, their plans were not included in this special study because conversion to group insurance rather than individual contracts and coverage of prior pensioners, who had no conversion rights, were under discussion when this survey was conducted.

<sup>5</sup> A benefit was regarded as extended if it was provided on a group basis; the provision of conversion rights to individual contracts was not regarded as an extension.

<sup>6</sup> See BLS Bulls. 1274 and 1280, op. cit.

<sup>7</sup> Six plans, covering 71,300 workers, limited their coverage of prior pensioners to those who retired after a specified date.

TABLE 1. COLLECTIVELY BARGAINED INSURANCE PLANS PROVIDING HEALTH BENEFITS FOR PENSIONERS, BY INDUSTRY DIVISION, JANUARY 1960

Industry division	Number		Percent	
	Plans	Active workers (thousands)	Plans	Active workers
All industries:				
All plans studied.....	300	4,933.2		
Plans extending benefits to pensioners.....	112	1,867.7	100.0	100.0
Plans covering both prior and future pensioners.....	76	1,619.9	68.5	87.4
Plans covering future pensioners only.....	36	247.8	31.5	12.6
Manufacturing industries:				
All plans studied.....	219	3,322.9		
Plans extending benefits to pensioners.....	83	1,481.4	100.0	100.0
Plans covering both prior and future pensioners.....	56	1,285.2	67.5	86.8
Plans covering future pensioners only.....	27	196.2	32.5	13.2
Nonmanufacturing industries:				
All plans studied.....	81	1,610.3		
Plans extending benefits to pensioners.....	29	386.3	100.0	100.0
Plans covering both prior and future pensioners.....	20	334.7	71.4	90.1
Plans covering future pensioners only.....	9	51.6	28.6	9.9

<sup>1</sup> Excludes 7 plans covering 315,600 active workers that provided benefits to future pensioners for a limited period only. Six of these plans terminated coverage after 1 year.

<sup>2</sup> Excludes 4 plans covering 31,300 active workers that extended coverage to pensioners at the same time a pension plan was established so that there were no "prior pensioners." These plans are included with plans covering future pensioners only.

NOTE: All coverage data refer to active workers and are not directly related to the number of future or prior pensioners covered.

provided by large plans than small in both industry divisions. Of the 76 plans, all but 2, covering 24,000 workers, reported that prior pensioners received the same benefits as future pensioners.

Only 2 of the 76 plans postponed the coverage of prior pensioners—in one case by 1 year after

TABLE 2. YEAR IN WHICH HEALTH BENEFITS WERE EXTENDED TO PRIOR AND FUTURE PENSIONERS<sup>1</sup>

Year	Plans	Active workers (thousands)
All plans with benefits for prior pensioners.....	76	1,619.9
Prior to 1950.....	5	303.0
1950.....	3	9.5
1951.....	1	18.0
1952.....	6	53.1
1953.....	13	772.0
1954.....	8	54.7
1955 <sup>2</sup> .....	7	74.3
1956.....	11	131.8
1957.....	7	29.0
1958.....	1	1.0
1959.....	3	17.8
1960.....	3	82.6
Not reported <sup>3</sup> .....	8	73.1

<sup>1</sup> Based on a survey of 300 collectively bargained health plans, covering approximately 5 million workers; of these, 112 plans, covering 1,870,000 workers, provided benefits for future pensioners. All coverage data refer to active workers and are not directly related to the number of future or prior pensioners covered.

<sup>2</sup> Includes 1 plan covering 4,000 active workers that provided medical coverage in 1955 and hospital and surgical coverage in 1957 and 1958.

<sup>3</sup> Includes 6 plans covering 52,400 active workers that extended benefits to prior and future pensioners at the same time, 1 plan covering 18,000 active workers that extended benefits to prior pensioners 1 year later than to future pensioners, and 1 plan covering 2,700 active workers that extended benefits to prior pensioners 7 years later.

benefits were extended to future pensioners and by 7 years in the other. More than half the plans extended benefits to pensioners between 1953 and 1956 (table 2). Among these were the plans of the major automobile and rubber manufacturers, which only a few years earlier had inaugurated pension plans for production workers.

## Financing

The method of financing benefits and the amount of pensioners' contributions were the same for prior pensioners as for future pensioners in all but one small plan. In this plan, although future pensioners' benefits were jointly financed, prior pensioners' benefits were financed solely by the employer. In 34 plans, no contributions were

TABLE 3. METHOD OF FINANCING<sup>1</sup> HEALTH BENEFITS FOR PRIOR AND FUTURE PENSIONERS AND ACTIVE WORKERS<sup>2</sup>

Method of financing <sup>1</sup>	Plans	Active workers (thousands)
All plans with benefits for prior pensioners.....	76	1,619.9
Prior pensioners' benefits financed by:		
Employer only.....	35	755.6
Pensioner only.....	26	675.6
Employer and pensioner.....	14	170.7
Other <sup>3</sup> .....	1	18.0
Future pensioners' benefits financed by:		
Employer only.....	34	749.6
Pensioner only.....	26	675.6
Employer and pensioner.....	15	176.7
Other <sup>3</sup> .....	1	18.0
Active workers' benefits financed by:		
Employer only.....	39	575.5
Worker only.....	1	1.5
Employer and worker.....	36	1,042.9

<sup>1</sup> Method used at the time benefits were extended to prior pensioners.

<sup>2</sup> For scope of survey, see footnote 1, table 2.

<sup>3</sup> Financed out of fund to which active worker and employer contribute.

made by either group of pensioners. Forty plans required the same contributions from both groups. The entire cost of 26 plans was borne by the pensioners,<sup>3</sup> while the cost was shared with the employers under remaining plans. (See table 3.)

Prior pensioners made the same contributions for similar benefits as active employees under 33 plans, covering about a third of the active workers

<sup>3</sup> Even where the pensioners pay the full cost of the plan, they get the usual advantages of group insurance and, in most instances, the added advantage of a low rate determined by the average cost of providing benefits for active employees and their dependents as well as for retired employees and their dependents. Since the active workers, being younger, have lower utilization rates than retired workers, the combined rate is particularly advantageous to the latter.

TABLE 4. COMPARISON OF AMOUNT OF CONTRIBUTION<sup>1</sup> BY PRIOR PENSIONERS AND ACTIVE WORKERS FOR HEALTH BENEFITS<sup>2</sup>

Relationship of contributions <sup>1</sup>	Plans	Active workers (thousands)
All plans with benefits for prior pensioners.....	76	1,619.9
Contributions from prior pensioners were—		
Same as from active workers.....	33	539.2
No contribution from either group.....	26	476.6
Same contribution from both groups.....	7	62.6
More than from active workers.....	25	738.4
No contribution from active workers.....	6	36.2
Both groups contribute.....	20	702.2
Less than from active workers.....	15	320.9
No contribution from prior pensioners.....	9	291.0
Both groups contribute.....	6	29.0
Comparative data not reported.....	3	22.3

<sup>1</sup> Relationship of contributions made at the time benefits were extended to prior pensioners.

<sup>2</sup> For scope of survey, see footnote 1, table 2.

## The Changing Nature of the Union

EDITOR'S NOTE.—*The article which follows was excerpted from an address by Richard A. Lester, Professor of Economics, Princeton University, given before the New York University Thirteenth Annual Conference on Labor, May 11, 1960. Minor word changes have been made, and ellipses to denote omissions from the text have not been indicated.*

IN THE COMING DECADE, workers and their unions will be confronted with various important problems. Technological change is transforming and reducing certain types of employment; white-collar and gray-collar employment is displacing blue-collar jobs. Changes in industry generate worker problems, but are they likely to result in a new surge of organization, a new period of worker discontent and unrest? Will they stimulate a significant forward thrust for unionism?

The labor expert speculating about the future of organized labor in the late 1920's or early 1930's would have been prone to predict little progress, growth, or pioneering. There are some similarities between the 1920's and the 1950's. In both decades, unions tended to be in a rut, with en-

(table 4). Most of these plans (26) required no contribution from either group. On the other hand, 25 plans, covering almost half the active workers, required greater contributions from pensioners than from active workers. Only 5 of these plans, covering a small fraction of the workers in this category, shifted from noncontributory coverage for active employees to contributory coverage for pensioners. Fifteen plans, covering a fifth of the active workers, required a smaller contribution from pensioners, generally as a result of a shift in the reverse direction—from contributory to noncontributory coverage.

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trenched machines, some corruption, and a dominant philosophy represented by a single national federation; some unions were experiencing absolute declines in membership. However, there are significant differences between the 1920's and the 1950's that one should note before attempting to theorize about organized labor in the 1960's:

1. Unions now are markedly different from those of the 1920's. They are larger and more centralized, staffed with experts. Their leaders are more like business executives, in operation if not in attitude. In terms of salary, status, and otherwise, the differences between business management and top labor leaders have been reduced. The union leader has become more of an organization man; attitudes toward the membership may contain a touch of paternalism.

2. The problems union leaders deal with have changed. Now they must wrestle with insurance and investment problems, with national and international issues, and with highly technical questions of law, wage structures, and fringe benefits. Dues collection and maintenance of the organization are relatively much less time consuming and troublesome. The Government guarantees representation of bargaining rights through certification; the union is assured a monopoly of representation rights through an election. Partly as a

result, the use of the strike and violence have declined.

3. Increased Government intervention and regulation have shifted union operations more and more into the public domain. The President exhorts unions about their wage policies, pointing out even the international repercussions of wage increases, and congressional committees have had union and management practices under close scrutiny. The Labor-Management Reporting and Disclosure Act of 1959 reflects the deep public concern that has led to Government regulation. An extreme illustration of this trend toward increasing public scrutiny is that of the court-appointed board which monitors the Teamsters union.

4. No large groups now exist which are underprivileged and unorganized, as the unskilled and semiskilled were in the 1920's. Those workers were acutely aware of the second-class nature of their industrial position and treatment. They felt a real need for more decent and dignified treatment. In contrast, American management has now developed industrial relations staffs, human relations techniques, and training programs to reduce employee discontent and irritation toward management.

5. The economic developments of the past two decades have altered the attitudes and problems of the working man and woman in America, with a consequent reduction in the militancy and momentum of organized labor.

The affluent society generates moderation and a middle-class outlook. The left-wing has tended to fall apart as real wages and living standards have risen, as family incomes have become less unequal, as social insurance and fringe benefits have spread income protection for workers, as the level of education and of occupations has been elevated, and as relatively high levels of employment have prevailed.

One result of such basic economic changes has been a growing lack of sympathy with organized labor. Rightly or wrongly, it has been blamed for a so-called wage-price spiral. The disillusionment with big government and big business has spread to big unions. Exposure of dictatorial, paternalistic, and corrupt practices in some unions has also helped to bring about among the intellectuals some disenchantment with all of organized labor.

## The Union's Role in Solving Future Problems

A revival and resurgence of the labor movement is conceivable if unionism and collective bargaining can provide satisfactory answers to some of the big problems in the next decade.

What promise to be the major problems that will confront the American working population in the future? Certainly armaments and peace will be among the foremost. To a considerable extent our thinking will be oriented internationally. We will be in economic competition especially with Russia and China, and we will be greatly concerned with the economic underdogs of the world—the underdeveloped and ill-fed peoples of Asia and Africa. American unionism has no special answers to these international problems, for they are not particularly amenable to solution by labor organizations and collective bargaining in this country.

The big domestic problems during the next decade will include the great expansion in higher education, industrial automation and its effects on employment, taxation, race relations and civil rights, the rising cost and need for medical care, urban renewal and transportation reform, price inflation, and the income and happiness of the aged.

For some of these problems, particularly automation, collective bargaining is certainly a significant element in any answer. However, the solutions for many of them are likely to be more in the hands of government and the community at large than in the realm of union-management relations.

Cold-war prospects and rapid developments in science and research make it doubtful that the role of unionism is likely to expand in American life during the next decade. Labor organization may not be able to claim to be a more significant and central instrument for solving some of the big problems on the horizon than are such private or community agencies as, for example, the churches. This would seem to be true of broad issues such as world peace, race relations, or the use of leisure time. On some of the problems, such as price inflation and transportation, unionism may be considered partly responsible for the difficulties and thereby be put on the defensive.

Many prospective problems would appear to require a broad-based attack, in which sectional



unionism would be only one cooperating element. The role of government as the representative of the whole community seems likely to continue to expand. If so, significant implications for the American labor movement will be (1) more stress on the political and public-relations aspects of the activities of organized labor, (2) greater public insistence on the assumption of responsibility by unions for the economic consequences of their actions, and (3) enlargement and strengthening of the role for the central federation of the AFL-CIO because it has the broadest base and serves as the national political arm for much of organized labor.

Greater power and authority in the central federation will, however, be a gradual development. As in England, the national union leaders will resist such accretion at the expense of the independence and autonomy of the national unions. Recent experience with the application of the ethical practices codes and the constitutional provision barring racial discrimination indicate the difficulties and pressures that will operate against greater central control. The general framework and philosophy of American unionism have become fairly fixed and entrenched by some 70 years of experience during which the labor movement has been maturing. Change and adaptation now are hampered by a certain institutional rigidity.

Furthermore, the American labor movement is to some extent impaled on the horns of a dilemma. Nationally, it has pushed for New Deal programs of Government action and regulation. It has pressed for full employment by monetary and fiscal policy, for more Government spending, and for more stringent Government regulation of business practices. But organized labor is definitely opposed to such planning or interference in one of the important elements in the equation—wages. Labor leaders, perhaps somewhat inconsistently, insist on maintaining free collective bargaining in the midst of economic planning. A number of European countries (Norway and The Netherlands, for instance) have adopted a national wage policy. But American and British unionism stands opposed to such a policy, even though we may have moved somewhat in that direction intellectually by the emphasis on productivity as a wage criterion.

Despite significant differences, it is interesting to observe that in European labor movements, too, the central federations have been growing in influence and power, the issue of national wage policy has gained in prominence, and the relative affluence and changes in the labor force have been reducing the strength of the union appeal. There, also, workers are tending to be merged into the middle class with the blurring of economic class distinctions.

## Conclusions

Conclusions may be summed up as follows:

1. In terms of the eligible work force, organized labor is more likely to decline than to advance over the next decade. Relative contraction will have significant psychological repercussions on the leadership and the influence of organized labor.

2. Gains in status and levels of living have served to blur class lines and to give manual workers more middle-class interests, problems, and outlooks.

3. The very successes of American unionism have robbed it of some appeal and vigor. In a sense, it has been outgrowing its historic mission of redressing the balance of rights and authority in industry. To some extent it has become ideologically exhausted and institutionally unable to shift to new areas for exploitation.

4. The big problems, for the most part, do not seem to be those for which the union instruments and appeal give organized labor any comparative advantage. On the contrary, for most of them there is no special union answer.

5. During the next decade, the influence of the central federation of the AFL-CIO is likely to enlarge somewhat, partly because of the expanding role of Government, which organized labor itself is promoting.

This set of conclusions does not mean that we will not continue to have some vigorous and militant local and national unions. Undoubtedly, over the next decade we will have some years of labor trouble and perhaps brief periods of renewed vigor. But the general tendency will be toward a new, if somewhat modest and less exciting, role for organized labor. Even with somewhat reduced momentum, it will not lack for problems to solve and pressures to exert.

## Wages in Miscellaneous Plastics Products, January-February 1960

EARNINGS OF PRODUCTION WORKERS in miscellaneous plastics products manufacturing establishments in January-February 1960 averaged \$1.76 an hour, exclusive of premium pay for overtime and for work on weekends, holidays, and late shifts. According to a survey conducted by the Bureau of Labor Statistics,<sup>1</sup> straight-time hourly earnings of the nearly 67,700 workers within the scope of the survey<sup>2</sup> ranged from \$1 to more than \$3.50 an hour. About a fourth of the workers earned less than \$1.40, and the same proportion received \$2.10 or more. Nationwide, men accounted for approximately three-fifths of the production workers in the industry and averaged \$1.94 an hour, compared with \$1.46 for women.

Among the five regions<sup>3</sup> for which separate data are presented, average hourly earnings were highest in the Pacific (\$1.94) and lowest in the Border States (\$1.54). Highest average earnings among the eight areas of industry concentration studied separately were recorded in Cleveland (\$2.05); the lowest average earnings were found in New York City (\$1.51).

Men tool and die makers were the highest paid among the occupational groups studied separately, averaging \$2.86 an hour; watchmen, at \$1.54 an hour, had the lowest average for men. Occupational averages for women ranged from \$1.63 an hour for compression-molding-machine operators to \$1.34 for shipping packers.

The study, which is the first the Bureau has made of this industry, also provides separate wage data for metropolitan and nonmetropolitan areas, for three establishment-size groups, and for union and nonunion establishments. In addition, it presents information on method of wage payment, shift differentials, hours of work, and such selected supplementary benefits as paid holidays and vacations, and health, insurance, and pension plans.

### Industry Characteristics

The study includes establishments principally engaged in molding primary plastics for the trade, and those fabricating miscellaneous finished plastics products from purchased materials. The

two most common methods of molding plastic products are injection molding and compression molding. In injection molding, granules or pellets of thermoplastic materials are loaded into a hopper and fed into an injection cylinder, where they are heated to a liquid state and then forced into the mold; as the material cools under pressure, it hardens to the shape of the mold. In compression molding, the proper amount of thermosetting materials (in the form of powder, granules, or preformed pellets) is loaded directly into the heated mold cavity; the press is closed and further heat and pressure are applied until the material hardens or cures so that it will retain the shape of the mold. Two additional types of molding are extrusion and blow molding. In the first, rods, tubes, strips, or similar shapes are formed by means of an extrusion machine. In blow molding, hollow objects such as bottles are produced by injecting a blob of heated plastic into the mold cavity of the machine and then inflating it against the cool mold surface, where it forms to shape.

About four-fifths of the estimated 67,671 production workers in the industry were employed in establishments using molding as the principal method of manufacture.

Two-fifths of all production workers were employed in plants primarily engaged in injection molding; and an additional one-sixth worked in plants where this was the second most important process used. In each of the regions for which separate data are presented (except the Border States<sup>4</sup>), injection molding also constituted the major method of manufacture in establishments employing the largest proportion of the workers. Approximately one-fourth of the workers were employed in establishments in which compression molding predominated; an additional 10 percent worked in extrusion molding plants. Blow molding establishments accounted for only a small percentage of the workers.

Lamination was the major method of manufacture in establishments employing about one-

<sup>1</sup> A more comprehensive account of this survey is presented in forthcoming BLS Report 168, *Wage Structure: Miscellaneous Plastics Products, January-February 1960*.

<sup>2</sup> The study was limited to establishments employing 20 or more workers at the time of reference of the universe data.

<sup>3</sup> For definition of regions, see footnote 2, table 1.

<sup>4</sup> In the Border States, the largest proportion of workers was employed in lamination plants.

tenth of the production workers. Lamination is a molding process in which layers of wood, paper, or cloth are impregnated with liquid resins and fused under heat and pressure into flat sheets of various shapes. Fabrication plants which convert plastic rods, tubes, and other shapes into finished products by sawing, machining, or other fabricating methods employed slightly less than one-tenth of the workers.

The Great Lakes region accounted for about two-fifths of the production workers within the scope of the survey; the Middle Atlantic region, approximately one-fifth; and New England, one-sixth. Among the eight labor market areas studied separately, the largest concentrations of employment were recorded in Chicago and Los Angeles-Long Beach.

Approximately four-fifths of the production workers were employed in establishments located in metropolitan areas.<sup>5</sup> The proportions varied

<sup>5</sup> Standard Metropolitan Statistical Areas as defined by the U.S. Bureau of the Budget.

among the regions from about two-thirds in New England to all in the Pacific region.

Establishments with collective bargaining agreements covering a majority of their workers employed slightly more than half of the industry's production workers in January-February 1960. Two-thirds of the workers in the Middle Atlantic region and slightly more than half in the New England and Great Lakes regions were employed in plants with such contract coverage. In the Border States and Pacific regions, the proportions were about two-fifths and one-fifth, respectively. Fifty-four percent of the production workers in metropolitan areas were employed in establishments where a majority of the workers were covered by union contracts, as compared with 45 percent in nonmetropolitan areas. In plants employing 250 or more workers, the proportion was about three-fourths, compared with approximately one-half and one-third in the two smaller size groups (20-99 and 100-249 workers, respectively) for which wage data were tabulated.

TABLE 1. PERCENTAGE DISTRIBUTION OF PRODUCTION WORKERS IN MISCELLANEOUS PLASTICS PRODUCTS MANUFACTURING ESTABLISHMENTS, BY AVERAGE STRAIGHT-TIME HOURLY EARNINGS,<sup>1</sup> UNITED STATES AND SELECTED REGIONS,<sup>2</sup> JANUARY-FEBRUARY 1960

Average hourly earnings <sup>1</sup>	United States <sup>2</sup>			New England	Middle Atlantic	Border States	Great Lakes	Pacific
	Total	Men	Women					
\$1.00 and under \$1.10.....	4.1	1.3	8.6	4.4	1.3	15.4	1.1	0.3
\$1.10 and under \$1.20.....	5.2	1.7	11.0	4.1	8.4	5.2	4.7	1.5
\$1.20 and under \$1.30.....	8.1	4.5	13.9	9.2	10.5	7.3	5.9	7.3
\$1.30 and under \$1.40.....	7.3	4.4	12.2	8.6	7.3	11.6	6.1	5.5
\$1.40 and under \$1.50.....	7.9	5.2	12.4	7.4	10.1	6.8	7.9	5.9
\$1.50 and under \$1.60.....	9.5	7.8	12.3	12.2	7.4	6.6	8.9	13.5
\$1.60 and under \$1.70.....	8.1	7.1	9.8	11.1	5.8	14.8	6.8	10.9
\$1.70 and under \$1.80.....	7.4	8.1	6.3	7.4	5.9	6.6	8.8	8.1
\$1.80 and under \$1.90.....	6.7	7.7	5.1	6.4	6.0	5.6	7.8	8.1
\$1.90 and under \$2.00.....	6.1	8.1	2.7	5.4	7.2	7.2	6.7	3.9
\$2.00 and under \$2.10.....	6.2	8.8	1.9	6.4	5.5	3.7	7.8	4.3
\$2.10 and under \$2.20.....	5.8	8.7	1.0	3.5	6.2	3.3	8.0	2.3
\$2.20 and under \$2.30.....	4.2	6.3	.9	3.3	5.9	2.2	4.6	2.7
\$2.30 and under \$2.40.....	3.0	4.3	.8	3.4	3.4	1.1	3.0	2.0
\$2.40 and under \$2.50.....	2.7	4.1	.5	1.9	2.0	.6	3.7	5.0
\$2.50 and under \$2.60.....	2.2	3.4	.2	2.0	2.3	.3	2.5	2.4
\$2.60 and under \$2.70.....	1.2	1.8	.1	.8	1.1	.6	1.4	2.1
\$2.70 and under \$2.80.....	.9	1.5	.1	.8	1.4	.2	.9	1.1
\$2.80 and under \$2.90.....	.7	1.0	(1)	.5	.8	.3	.7	1.5
\$2.90 and under \$3.00.....	.5	.8	(1)	.4	.5	.3	.4	2.2
\$3.00 and under \$3.10.....	.6	1.0	(1)	.3	.4	.1	.5	2.2
\$3.10 and under \$3.20.....	.4	.6	(1)	.2	.2	.....	.4	1.4
\$3.20 and under \$3.30.....	.4	.6	(1)	.2	.1	.....	.3	2.0
\$3.30 and under \$3.40.....	.1	.2	.....	.1	.2	.....	.1	.5
\$3.40 and under \$3.50.....	.2	.3	.....	(1)	(1)	.....	.4	.2
\$3.50 and over.....	.4	.7	(1)	.1	.1	.1	.5	2.8
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	67,671	41,991	25,680	11,679	14,986	3,172	28,081	4,379
Average hourly earnings <sup>1</sup> .....	\$1.76	\$1.94	\$1.46	\$1.70	\$1.75	\$1.54	\$1.83	\$1.94

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>2</sup> The regions used in the study include: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West

Virginia; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; and *Pacific*—California, Nevada, Oregon, and Washington.

<sup>3</sup> Includes data for regions in addition to those shown separately.

<sup>4</sup> Less than 0.05 percent.

NOTE: Because of rounding, sums of individual items may not equal 100.

Women accounted for 38 percent of all production workers; the proportion varied regionally from 31 percent in the Middle Atlantic region to 44 percent in the Pacific region. Among the eight labor market areas studied separately, women

represented proportions varying from about a fourth in New York City to slightly more than half in Detroit. They were most commonly employed as finishers of molded plastics products and as injection-molding-machine operators.

TABLE 2. NUMBER AND AVERAGE STRAIGHT-TIME HOURLY EARNINGS<sup>1</sup> OF WORKERS IN SELECTED OCCUPATIONS<sup>2</sup> IN MISCELLANEOUS PLASTICS PRODUCTS MANUFACTURING ESTABLISHMENTS, UNITED STATES AND SELECTED REGIONS,<sup>3</sup> JANUARY-FEBRUARY 1960

Occupation and sex	United States <sup>4</sup>		New England		Middle Atlantic		Border States		Great Lakes		Pacific	
	Number of workers	Average hourly earnings <sup>1</sup>	Number of workers	Average hourly earnings <sup>1</sup>	Number of workers	Average hourly earnings <sup>1</sup>	Number of workers	Average hourly earnings <sup>1</sup>	Number of workers	Average hourly earnings <sup>1</sup>	Number of workers	Average hourly earnings <sup>1</sup>
<b>MEN</b>												
<i>Processing jobs</i>												
Blow-molding-machine operators (operate only)	116	\$1.90							38	\$2.04		
Casters	143	1.94			45	\$2.16						
Compression-molding-machine operators (set up and operate)	436	1.97							353	2.01		
Compression-molding-machine operators (operate only)	3,357	2.03	688	\$2.30	1,209	1.96			1,234	2.04	72	\$1.98
Extrusion-press operators (set up and operate)	553	1.99	189	1.84	150	2.03			118	2.56		
Extrusion-press operators (operate only)	1,020	1.79	149	1.70					430	2.05	61	2.29
Finishers, molded plastics products	2,481	1.68	154	1.70	900	1.58			1,081	1.76	146	1.86
Injection-molding-machine operators (set up and operate)	521	2.01			33	2.32	22	\$1.69			9	2.04
Injection-molding-machine operators (operate only)	4,812	1.62	933	1.51	1,941	1.63			1,669	1.62		
Laminating-press operators	297	2.14	56	1.88	48	2.07			109	2.27	37	2.66
Mandrel men	233	2.04			134	2.16						
Plastics cutters, machine	340	1.86	50	1.71	74	1.90			117	1.85	34	2.52
Powdermen	570	1.74	138	1.56	134	1.73			210	1.86	36	1.91
Preform-machine operators	346	1.80	46	1.75	118	1.75			134	2.00		
Setup men, plastics-molding machines	979	2.06	169	1.96	178	2.09			520	2.05	65	2.41
Compression-molding machines	183	2.16	32	2.06	67	2.17			56	2.14		
Extrusion presses	54	2.21							18	2.25		
Injection-molding machines	584	2.03	90	1.83	90	2.10			350	2.05	45	2.28
Tumbler operators	208	1.74	62	1.81	68	1.66			68	1.78		
<i>Maintenance jobs</i>												
Electricians, maintenance	292	2.46	65	2.32	66	2.43	23	2.12	123	2.61	6	2.80
Helpers, trades, maintenance	323	1.88	67	1.70	53	1.80	17	1.65	145	2.03		
Machine-tool operators, toolroom	221	2.25	16	2.32	28	2.44	71	2.01	87	2.41		
Mechanists, maintenance	326	2.48	122	2.46	73	2.47	22	2.14	88	2.63		
Maintenance men, general utility	966	2.10	162	1.89	227	2.21	24	1.90	482	2.13	29	2.41
Mechanics, maintenance	383	2.30	129	2.24	15	2.25	14	2.22	180	2.33		
Pipefitters, maintenance	95	2.42	28	2.37	24	2.44	13	2.13	29	2.57		
Tool and die makers	1,070	2.86	246	2.56	418	2.73	44	2.58	669	2.99	214	3.11
<i>Miscellaneous jobs</i>												
Guards	76	1.87			33	1.67						
Inspectors, product	688	2.03	119	1.99	116	2.06	19	1.80	353	2.05	30	2.41
Janitors	833	1.63	111	1.55	135	1.63	66	1.36	379	1.73	77	1.69
Laborers, material handling	1,896	1.71	431	1.62	214	1.63			996	1.78	45	1.71
Packers, shipping	930	1.79	122	1.76	145	1.73	69	1.60	404	1.97	61	1.59
Receiving clerks	107	1.94	35	1.77	20	1.90			36	2.11		
Shipping clerks	384	1.92	98	1.62	112	1.99	11	1.58	118	2.12	24	1.87
Shipping and receiving clerks	378	2.03	67	1.78	72	2.05	7	1.76	161	2.15	22	2.47
Truckers, power (forklift)	122	1.96			25	1.93	7	1.66	46	1.96	13	1.84
Watchmen	120	1.54	29	1.61	19	1.51	10	1.49	61	1.82		
<b>WOMEN</b>												
<i>Processing jobs</i>												
Compression-molding-machine operators (operate only)	1,019	1.63	105	1.77					508	1.78		
Finishers, molded plastics products	9,346	1.47	2,406	1.47	2,002	1.47			3,720	1.50	544	1.48
Injection-molding-machine operators (operate only)	5,344	1.47	567	1.43	319	1.51	230	1.36	4,009	1.40	24	2.16
<i>Miscellaneous jobs</i>												
Inspectors, product	1,384	1.50	198	1.48	564	1.42	33	1.22	458	1.63	51	1.55
Janitors	54	1.53	9	1.50	6	1.58	6	1.26	61	1.56		
Packers, shipping	963	1.34	298	1.10	156	1.37	7	1.32	414	1.47	43	1.50

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>2</sup> For definition of regions, see footnote 2, table 1.

<sup>3</sup> Includes data for regions in addition to those shown separately.

<sup>4</sup> Includes workers in classifications in addition to those shown separately.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.



TABLE 3. AVERAGE STRAIGHT-TIME HOURLY EARNINGS<sup>1</sup> OF WORKERS IN SELECTED OCCUPATIONS IN MISCELLANEOUS PLASTICS PRODUCTS MANUFACTURING ESTABLISHMENTS, EIGHT SELECTED AREAS, JANUARY-FEBRUARY 1960

Occupation and sex	Chicago, Ill.	Cleveland, Ohio	Detroit, Mich.	Leominster, Mass.	Los Angeles-Long Beach, Calif.	Minneapolis-St. Paul, Minn.	Newark and Jersey City, N.J.	New York, N.Y.
<b>MEN</b>								
<i>Processing jobs</i>								
Compression-molding-machine operators (operate only).....	\$2.17				\$1.87		\$1.07	
Finishers, molded plastics products.....	1.67		\$2.19	\$1.78	1.86	\$1.68	1.57	\$1.34
Injection-molding-machine operators (operate only).....	1.86			1.47	2.13	1.92	1.67	1.37
Powdermen.....	1.69		2.04	1.61	2.19		1.67	1.76
Setup men, plastics-molding machines <sup>2</sup> .....	2.12	\$2.03	2.06	1.72	2.16	2.25	2.11	1.93
Injection-molding machines.....	2.10	1.98	1.87	1.71	2.16		2.12	1.99
<i>Maintenance jobs</i>								
Electricians, maintenance.....	2.73			1.98	2.89			2.34
Maintenance men, general utility.....	2.06	2.18	2.51	1.71	2.41		2.32	2.08
Tool and die makers.....	3.17	2.86	3.34	2.42	3.08	2.85	2.69	2.70
<i>Miscellaneous jobs</i>								
Inspectors, product.....	1.90		2.62		2.41	2.00	1.71	2.09
Janitors.....	1.59		1.79	1.40	1.66	1.74	1.43	1.31
Laborers, material handling.....	1.72	1.88	1.59	1.54	1.71		1.55	
Packers, shipping.....	1.71		2.12		1.59		1.64	1.40
Receiving clerks.....	1.94			1.58	2.02			
Shipping clerks.....	2.32			1.70	1.87			
Shipping and receiving clerks.....	2.30	2.13	2.29	1.69	2.40		1.91	
Truckers, power (forklift).....			2.20		1.84		1.75	
<b>WOMEN</b>								
<i>Processing jobs</i>								
Finishers, molded plastic products.....	1.44	1.83	1.59	1.40	1.48	1.62	1.46	1.16
Injection-molding-machine operators (operate only).....	1.50	1.48	1.52	1.40			1.57	
<i>Miscellaneous jobs</i>								
Inspectors, product.....	1.54			1.36	1.55		1.45	
Packers, shipping.....	1.52				1.50		1.49	

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>2</sup> Includes workers in classifications in addition to that shown separately.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

Earnings of approximately one-sixth of the production workers were based on incentive wage plans. Regionally, the proportions varied from virtually none in the Pacific to almost a fourth of the workers in New England. Approximately a fourth of the workers in Leominster, Mass., and a fifth in Newark and Jersey City were paid on this basis, contrasted with less than a tenth in Cleveland, Detroit, Los Angeles-Long Beach, and New York City.

### Average Hourly Earnings

Production workers in miscellaneous plastics products manufacturing establishments averaged \$1.76 an hour in January-February 1960, exclusive of premium pay for overtime and for work on weekends, holidays, and late shifts (table 1). The estimated 41,991 men in the industry averaged \$1.94 an hour, compared with \$1.46 for the 25,680 women. Earnings of production workers in the Great Lakes region, where the industry is heavily concentrated, averaged \$1.83 an hour. In the

other four regions for which separate data are presented, average hourly earnings varied from \$1.54 in the Border States to \$1.94 in the Pacific region.

Between \$1 and \$1.40 an hour was received by approximately one-fourth of the workers, and \$2.10 or more was paid to about the same proportion.

Production workers in metropolitan areas averaged 12 cents an hour more than those employed in nonmetropolitan areas, \$1.78 compared with \$1.66. The difference amounted to 12 cents in the New England region, 5 cents in the Middle Atlantic region, and 3 cents in the Great Lakes region.

Earnings of production workers in establishments employing 250 or more workers averaged \$1.93 an hour, compared with \$1.73 for those in establishments with 100 to 249 workers and \$1.62 in plants with 20 to 99 workers. In the Great Lakes region, the average hourly earnings of workers in these three establishment-size groups were \$2.05, \$1.79, and \$1.63, respectively; in the Middle Atlantic region, \$2.03, \$1.79, and \$1.57,

respectively; and in New England, \$1.87, \$1.59, and \$1.55, respectively.

Among the eight areas of industry concentration, production workers' hourly earnings averaged \$2.05 in Cleveland, \$1.99 in Minneapolis-St. Paul, \$1.93 in Detroit, \$1.88 in Los Angeles-Long Beach, \$1.76 in Chicago, \$1.67 in Newark and Jersey City, \$1.52 in Leominster, and \$1.51 in New York City.

### Occupational Earnings

Wages for occupational classifications accounting for approximately two-thirds of the production workers were studied separately (table 2). Men tool and die makers had the highest average earnings—\$2.86 an hour. Lowest average earnings for men, \$1.54 an hour, were recorded for watch-

men. The numerically most important jobs for men included injection-molding-machine operators who do not set up the machines (average earnings of \$1.62 an hour), compression-molding-machine operators who do not set up the machines (\$2.03), and molded-plastics-products finishers (\$1.68).

Women finishers of molded plastics products and injection-molding-machine operators accounted for more than half of all women production workers; each of these two groups averaged \$1.47 an hour. Highest average hourly earnings for the women's occupational classifications studied were recorded for compression-molding-machine operators (\$1.63); the lowest recorded average was for shipping packers (\$1.34).

Average hourly earnings of workers in the selected occupations in the Great Lakes and Pacific regions were generally higher than the na-

TABLE 4. PERCENT OF PRODUCTION WORKERS EMPLOYED IN MISCELLANEOUS PLASTICS PRODUCTS MANUFACTURING ESTABLISHMENTS WITH FORMAL PROVISIONS FOR SELECTED SUPPLEMENTARY WAGE BENEFITS,<sup>1</sup> UNITED STATES AND SELECTED REGIONS,<sup>2</sup> JANUARY-FEBRUARY 1960

Selected benefits	United States <sup>3</sup>	New England	Middle Atlantic	Border States	Great Lakes	Pacific <sup>4</sup>
<b>Paid vacations: <sup>5</sup></b>						
After 1 year of service	98	98	99	100	98	98
Less than 1 week	4		2	14	5	
1 week	82	88	82	83	82	84
Over 1 and under 2 weeks	6		11	3	6	8
2 weeks	5	11	4		5	5
After 5 years of service	99	98	100	100	99	98
1 week or less	9	9	4	15	6	6
Over 1 and under 2 weeks	5	3	10	3	3	3
2 weeks	79	87	83	82	80	79
Over 2 weeks	6	1	4		9	12
After 15 years of service	99	98	100	100	99	98
Less than 2 weeks	8	9	6	18	4	6
2 weeks	37	36	40	28	36	38
Over 2 and under 3 weeks	3		6		3	3
3 weeks	49	54	46	54	54	48
Over 3 weeks	1		1		2	3
<b>Paid holidays: <sup>6</sup></b>						
Less than 4 holidays	95	95	99	94	93	100
4 holidays	1				1	
5 holidays	1	2		13		
6 holidays	5	3	7	(7)	3	8
7 holidays	43	25	24	82	56	65
8 holidays	31	36	43	28	24	21
More than 8 holidays	14	27	21		9	5
1	1	2	5			
<b>Health, insurance, and pension plans: <sup>7</sup></b>						
Life insurance	81	81	81	81	81	73
Accidental death and dismemberment insurance	62	61	58	61	69	60
Sickness and accident insurance or sick leave or both <sup>8</sup>	69	68	84	67	74	36
Sickness and accident insurance	66	66	81	61	73	15
Sick leave (full pay, no waiting period)	5	2	10		2	11
Sick leave (partial pay or waiting period)	2	(7)	4		1	2
Hospitalization insurance	87	83	89	60	89	95
Surgical insurance	84	80	85	51	89	93
Medical insurance	64	63	65	36	67	81
Catastrophe insurance	19	26	10	12	17	56
Retirement pension	28	34	35	26	25	14

<sup>1</sup> If formal provisions for supplementary benefits in an establishment were applicable to half or more of the workers, the benefits were considered applicable to all workers. Because of length-of-service and other eligibility requirements, the proportion of workers currently receiving the benefits may be smaller than estimated.

<sup>2</sup> For definition of regions, see footnote 2, table 1.

<sup>3</sup> Includes data for regions in addition to those shown separately.

<sup>4</sup> Vacation payments such as percentage of annual earnings were converted to an equivalent time basis. The periods of service were arbitrarily chosen and do not necessarily reflect the individual provisions for progression. For example, the changes indicated at 5 years may include changes occurring between 1 and 5 years.

<sup>5</sup> Because of rounding, sums of individual items may not equal totals.

<sup>6</sup> Tabulations were limited to full-day holidays; additional half-day holidays were also provided in some establishments.

<sup>7</sup> Less than 0.5 percent.

<sup>8</sup> Includes only those plans for which at least a part of the cost is borne by the employer, and excludes legally required plans such as workmen's compensation and social security.

<sup>9</sup> Unduplicated total of workers receiving sick leave or sickness and accident insurance shown separately.

tional averages; the New England and Border State averages were generally below the national levels. In all of the regions, however, there was little uniformity in the extent of variation from the industrywide averages. Among the eight areas for which separate earnings data are presented in table 3, occupational averages for plastics-molding machine setup men ranged from \$1.72 an hour in Leominster to \$2.25 an hour in Minneapolis-St. Paul.

Occupational average earnings in establishments employing 250 or more workers usually were higher than in either of the two smaller establishment-size groups for which data were tabulated.

In the two regions for which comparisons could be made, New England and the Great Lakes, workers in the selected occupations in metropolitan areas generally had higher average hourly earnings than workers in nonmetropolitan areas. The differential usually amounted to less than 20 cents.

Workers in the selected occupations in establishments where a majority were covered by collective bargaining agreements generally had higher average hourly earnings than did the workers in establishments where none or a minority were covered by such contracts. In several instances, however, workers in the latter group of establishments had higher average earnings. There was little consistency in the amount of the differential.

Incentive-paid workers typically had higher occupational average hourly earnings than workers paid time rates. For example, in New England, men compression-molding-machine operators who were paid on an incentive basis average \$2.37, compared with \$1.83 for time-rated workers. In the Middle Atlantic region, the corresponding hourly averages were \$2.13 and \$1.56, and in the Great Lakes region, they were \$2.34 and \$1.79, respectively.

In considering the differences in wages noted in the preceding paragraphs, it must be emphasized that the exact influence of any one characteristic cannot be isolated. For example, as indicated earlier, wages in the miscellaneous plastics products industry tend to be higher in large establishments than in small ones. Large establishments also tend to be more highly unionized and to make greater use of wage incentives. The factors of

size, unionization, method of wage payment, and possibly other characteristics, such as location, may all play a role in the determination of wage levels. In a study such as this, their separate influence cannot be disentangled.

### Selected Establishment Practices

Data were also obtained on work schedules and supplementary benefits, including paid holidays and vacations, retirement plans, life insurance, sickness and accident insurance, and hospitalization and surgical benefits for production workers.

*Scheduled Weekly Hours.* A work schedule of 40 hours a week was in effect in establishments employing four-fifths of the production workers in the industry in January-February 1960. This was the predominant schedule in each region; however, about a tenth of the workers in four regions and about a fourth in the Chicago and Leominster areas were scheduled to work a 48-hour week.

*Shift Provisions and Practices.* Nearly four-fifths of the production workers were employed in establishments having formal provisions for the payment of shift differentials for work on second and third or other late shifts. About 20 percent of all production workers were employed on second-shift operations and 15 percent on third- or other late-shift operations during the payroll period studied. The differentials paid these workers varied greatly, but most commonly amounted to 5 cents above first-shift rates for second-shift work and 10 cents for third-shift work.

*Paid Holidays.* Paid holidays were provided nearly all production workers. The most common provisions were 6 or 7 holidays annually, with 1 or 2 additional half days in some instances (table 4). These were also the predominant provisions in each of the regions and areas studied separately. However, nearly a third of the workers in New England and a fourth in the Middle Atlantic region received 8 days or more a year.

*Paid Vacations.* Virtually all production workers were eligible for paid vacations after qualifying periods of service. Approximately four-fifths of the

production workers were eligible for 1 week of vacation after 1 year of service and 2 weeks after 5 years. One-half were employed in establishments which provided vacations of at least 3 weeks after 15 years of service. These proportions were also roughly applicable to each of the five regions studied separately. The vacation provisions differed among the eight areas of industry concentration; for example, the proportion receiving 3 weeks or more after 15 years of service varied from about one-sixth in New York City to about three-fifths or more in Chicago, Cleveland, Detroit, and Minneapolis-St. Paul.

**Health, Insurance, and Pension Plans.** Life, hospitalization, and surgical insurance, for which employers paid at least part of the cost, were available to slightly more than four-fifths of the production workers. Accidental death and dismemberment insurance, sickness and accident in-

surance, and medical insurance were applicable to three-fifths of the workers. For these types of insurance, there was comparatively little variation in the proportions of workers covered in most of the regions and areas for which separate data are reported. For example, life insurance coverage included 81 percent of the workers in four regions and 73 percent in the Pacific region; among the eight areas studied separately, the proportions covered by life insurance ranged from 68 to 97 percent.

Retirement pension plans (other than those available under Federal Old-Age, Survivors, and Disability Insurance) were provided by establishments employing 28 percent of the workers. Among the regions and areas, these plans were more common in the New England and Middle Atlantic regions and in Cleveland than elsewhere.

—FRED W. MOHR

Division of Wages and Industrial Relations



# Significant Decisions in Labor Cases\*

## Arbitration

On June 20, the U.S. Supreme Court handed down three decisions limiting the scope of the Federal courts in their review of arbitration cases. The holdings constituted a refinement of the Court's 1957 *Lincoln Mills* decision which upheld court enforcement of arbitration clauses in collective bargaining contracts. Brief summaries of the three cases follow:

**Case No. 1.** The U.S. Supreme Court held<sup>1</sup> that in a suit to compel arbitration in a case where the parties had agreed to submit all questions of contract interpretation to an arbitrator, the Federal courts were limited to determining whether the dispute in issue was governed by the contract and that they had no power to evaluate the merits of the dispute.

In this case, a steelworker left his job as a result of an injury for which he successfully brought an action for workmen's compensation. The employee, whose doctor found that he was 25 percent permanently disabled, filed a grievance through his union for reinstatement on the basis of the seniority provisions of the collective bargaining contract. In an enforcement action brought by the union after the employer had refused to arbitrate the grievance, the employer took the position that the employee was precluded from demanding reinstatement since he was permanently partially disabled and had already accepted compensation therefor.

The district court agreed substantially with the employer's position and granted summary judgment on the grounds that the acceptance of the compensation award precluded the employee from asserting his seniority rights. The court of appeals affirmed<sup>2</sup> the action of the district court,

with the added comment that the grievance was "a frivolous, patently baseless one, not subject to arbitration under the collective bargaining agreement."

In reversing the lower courts, the U.S. Supreme Court quoted section 203(d) of the Labor Management Relations Act, which states that "final adjustment by a method agreed upon by the parties is hereby declared to be the desirable method for settlement of grievance disputes. . . ." The Court declared that this method was intended to include all types of disputes and not just those which a court would consider meritorious. The Court pointed out that the courts should not be concerned with the equities of the claim but should confine their inquiry solely to the issue of whether the claim is on its face governed by the contract. If the claim is one which on its face is so governed, then it should be submitted to the arbitrator regardless of the fact that a court might consider the grievance frivolous. The Court held that the purpose of the grievance and arbitration procedure was to provide an environment wherein all grievances, both serious and frivolous, could be aired and possibly settled, since "the processing of even frivolous claims may have therapeutic values [of] which those who are not part of the plant environment may be quite unaware."

A concurring opinion pointed out that the entire purpose of an arbitration clause is to substitute the informed judgment of an arbitrator for that of a court. Therefore, when a court is asked to enforce an arbitration clause it should ordinarily refrain from involving itself in the interpretation of the substantive provisions of the contract.

**Case No. 2.** The U.S. Supreme Court held<sup>3</sup> that insofar as an arbitrator's award was within the limits determined by the contract, a court could not refuse enforcement of the award merely be-

\*Prepared in the U.S. Department of Labor, Office of the Solicitor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

<sup>1</sup> *United Steelworkers v. American Manufacturing Co.* (U.S. Sup. Ct., June 20, 1960).

<sup>2</sup> 264 F. 2d 624.

<sup>3</sup> *United Steelworkers v. Enterprise Wheel and Car Corp.* (U.S. Sup. Ct., June 20, 1960).

cause his interpretation of the collective bargaining contract differed from that of the court.

In this case, a group of employees left their jobs in protest against the discharge of a fellow worker. When the employer refused to reinstate the employees or arbitrate the matter, the union sought enforcement of the arbitration provision of the contract in the district court. The contract provided that any unresolved differences "as to the meaning and application" of their contract should be submitted to an arbitrator. The contract also provided that if the arbitrator decided that an employee had been suspended or discharged in violation of the agreement, the employee would be reinstated with compensation for the lost time. The parties had also agreed that since the arbitrator would be their final judge, both parties would refrain from instituting civil suits or legal proceedings against the other for alleged violations of the contract.

The court ordered arbitration, and the arbitrator found that although the behavior of the employees was improper, it did not warrant discharge; at most, a 10-day suspension was in order. Although the contract had expired between the time of the discharge of the employees and the arbitration award, the arbitrator nevertheless held that the contract had imposed upon the employer an unconditional obligation which was not relieved by the expiration of the contract. Accordingly, the award granted reinstatement with back pay, minus pay for the 10-day suspension and any sums received from other employment.

The district court ordered enforcement of the award but the court of appeals, while recognizing the district court's jurisdiction to enforce the award, held that the arbitrator's failure to specify the exact amounts to be deducted from the back pay rendered the award unenforceable. The court of appeals held that the award for back pay and reinstatement after the expiration of the contract was also unenforceable because no rights accrued to the employees after the expiration.

In reversing the appellate court, the U.S. Supreme Court held that even though the opinion of the arbitrator was ambiguous as to the effect of the expiration date upon the award, a mere ambiguity in an opinion accompanying an award, from which it might be inferred the arbitrator exceeded his authority, provided no basis for

refusing to enforce the award itself. In the first place, the Court pointed out, arbitrators have no obligation to supply an opinion to accompany the award and an attempt by a court to draw an inference from an accompanying opinion that the arbitrator has exceeded his authority might result in his not writing an opinion at all. This, in the Court's view, would be an undesirable situation. The Court stated, however, that it saw no reason to assume in this case that the arbitrator might have exceeded his authority or abused the trust which the parties confided in him.

The Court pointed out that the appellate court's decision refusing to enforce the reinstatement and back-pay awards was not based on any finding that the arbitrator had exceeded his authority under the contract; the court of appeals simply disagreed with his interpretation of it. This, the Supreme Court held, is not the province of the court. It is the arbitrator's judgment which is bargained for by the parties, not the court's, and the courts have "no business overruling him because their interpretation of the contract is different from his." His award is "legitimate," the Court held, ". . . so long as it draws its essence from the collective bargaining agreement." According to the Court, it is only when the arbitrator's words manifest infidelity to this obligation, that the courts may refuse to enforce his award. In the absence of evidence of such infidelity, the courts must enforce an arbitrator's award whether or not they agree with his interpretation of the contract.

The dissent stated that no rights accrued to the employees after the expiration date of the contract. After that date, according to the dissent, the employer could dismiss his employees at will and no arbitrator could order him to do otherwise. The rights and duties of both parties to the contract existed only by virtue of the contract and, in the view of the dissent, no rights accrued to the employees under the contract after it ceased to exist, although the rights which had accrued during the term of the contract could be arbitrated even after its expiration.

*Case No. 3.* The U.S. Supreme Court held<sup>4</sup> that in the absence of an express agreement excluding the contracting-out of work from arbitration,

<sup>4</sup> *United Steelworkers v. Warrior and Gulf Navigation Co.* (U.S. Sup. Ct., June 20, 1960).

grievances arising from subcontracting must be arbitrated.

This case involved an employer who transported steel products by barge. At his terminal, he employed about 42 men to perform maintenance and repair work. By contracting out some of this work, the employer reduced the workers from 42 to 23. As a result, a number of the employees signed a grievance petition demanding that the contracting-out, which they regarded as a "partial lockout," be arbitrated in accordance with the contract. In addition to the usual grievance and arbitration procedure, the contract contained a clause excluding from arbitration any "matters which [were] strictly a function of management." The employer refused to arbitrate and successfully argued in both the district court and the court of appeals that the contracting-out of work was excluded from arbitration as a strictly management function.

The U.S. Supreme Court, in overruling the lower courts, held that since the *Lincoln Mills*<sup>5</sup> decision, an arbitration provision in a collective agreement could be enforced by virtue of section 301(a) of the Labor Management Relations Act. The Court stated that it is the policy of that act to promote industrial stability through the collective bargaining process. In order to effectuate this policy, it is necessary, according to the Court, to regard a collective bargaining agreement as far more than a mere commercial contract which parties are free to enter or avoid as they wish. In the Court's view, the collective bargaining agreement is a "generalized code" covering the whole employment relationship, which, unlike a commercial contract, usually exists before the contract is even executed.

Therefore, the Court asserted that, apart from matters that the parties specifically exclude, all questions on which the parties disagree must come within the scope of the grievance and arbitration provisions of the contract. Since the exclusionary clause in the contract at issue did not expressly

mention the contracting-out of maintenance work, it must be assumed that it was implicit in the arbitration clause. To hold otherwise would be to restrict the scope of the arbitration clause, which is itself a part of the continuing collective bargaining process protected by the congressional policy of favoring the settlement of disputes through the method agreed upon by the parties. Moreover, the Court pointed out that if the courts, in their legitimate function of determining what is arbitrable, were to consider what is strictly a management function and what is not, the "arbitration clause would be swallowed up by the exception."

A concurring opinion pointed out that the issue in this case was essentially no different from that in the *American*<sup>6</sup> case, namely, whether the contract demonstrated intent to arbitrate a particular grievance. However, the concurring opinion asserted that in the instant case the scope of the inquiry may be broader because an exclusionary clause was involved, whereas in the *American* case there was none. But this inquiry should be confined to a search for an explicit provision which would withdraw the subject matter from arbitration under the exclusionary clause. It would be hazardous, according to the concurring opinion, to inquire more deeply than this into the merits.

The dissent declared that the contract is the source and limit of the authority of the arbitrator to decide the matter before him.<sup>7</sup> His powers must rest, according to the dissent, upon clear and definitive agreement between the parties; his powers can never be implied.<sup>8</sup> The dissent stated that the Court, in holding that the arbitrator's source of law is "not confined to the express provisions of the contract," presented a "new and strange doctrine." The dissent maintained that for 19 years the employer in this case had contracted out work, and that prolonged union efforts to induce the employer to cease doing so made it apparent that the employer, in continuing to do so, was engaging in a strictly management function. Also, inquired the dissent, did not the repeated refusals of the employer to change this practice, indicate that he had never intended to submit this question to arbitration? The dissent agreed that the merits of the issue should not be examined, but the Court must decide the jurisdictional issue: it must determine whether the parties by plain language manifested their intent to submit the issue to the arbitrator. If not, the

<sup>5</sup> *Textile Workers v. Lincoln Mills*, 353 U.S. 448. For a summary of this decision, see *Monthly Labor Review*, August 1957, pp. 976-977.

<sup>6</sup> See Case No. 1 in the group.

<sup>7</sup> *Burchell v. Merak*, 17 How. 334, 349; *Continental Insurance Co. v. Garrett* 125 F. 580, 590.

<sup>8</sup> *United States v. Moorman*, 338 U.S. 457, 462; *Mercantile Trust Co. v. Hensley*, 205 U.S. 298, 309; *Fernandez and Hnos v. Rickert Mills*, 119 F. 2d 800, 815; *Marchant v. Mead-Morrison Manufacturing Co.*, 252 N.Y. 284, 299; *Continental Milling and Feed Co. v. Doughnut Corp.*, 186 Md. 606; and *Jacob v. Weissner*, 207 Pa. 484.



courts cannot compel arbitration. In the view of the dissent, the employer did not manifest a willingness to arbitrate the contracting-out of his work, and therefore the Court could properly compel him to arbitrate.

### Other Labor Relations

*Preemption.* The U.S. Supreme Court upheld<sup>9</sup> the constitutionality of part of a State statute prohibiting the collection of dues for a union if any officers or agents of such union had been convicted of a felony and had not subsequently been pardoned. The Court further held that, since the purpose of such a State statute had received congressional approval, it could not be said that Federal legislation had preempted the regulation of qualifications for union office.

In 1920, the appellant in the instant case received a suspended sentence in New York for a charge of grand larceny. In 1950, the appellant, DeVeau, became secretary-treasurer of Local 1346 of the International Longshoremen's Association in which capacity he controlled the local's funds and served as bargaining representative.

According to section 8 of the New York Waterfront Commission Act of 1953, it is unlawful for any person to collect dues for a union while anyone who had been convicted of a felony and had not been subsequently pardoned remained an officer of the union. In 1956, the district attorney of Richmond County warned that he would prosecute anyone collecting dues for local 1346 as long as the appellant continued as an official for the local. In the face of this warning, the union suspended DeVeau, who thereupon sought a declaratory judgment in the Supreme Court of Richmond County on the constitutionality of section 8 of the New York Act. He contended that section 8 was in conflict with the supremacy clause of the U.S. Constitution, that it was a violation of the due process clause of the 14th amendment, and that it constituted a bill of attainder and an ex post facto law.

The county supreme court upheld the validity of section 8 and found that the 1920 conviction for a felony came within the meaning of that section. The court's decision was upheld upon appeals to the higher State courts and since the constitutionality of a State statute was involved, the case went to the U.S. Supreme Court.

The appellant argued that section 8 of the New York Waterfront Commission Act conflicted with both the Labor Management Relations Act and the Labor-Management Reporting and Disclosure Act of 1959. He asserted that both sections 1 and 7 of the LMRDA protect a worker's right to organize and to choose his bargaining representative freely, while on the other hand, section 8 of the New York statute restricts a worker's freedom to choose his bargaining representative by declaring that he may not select a man previously convicted of a felony. Also, according to the appellant, section 8 of the New York statute conflicts with section 504(a) of the LMRDA, which lists the qualifications for an individual to hold office in a labor organization. DeVeau concluded that the Federal Government had preempted the field in these areas and the conflicting sections of the State law must give way under the supremacy clause of the Constitution.

In support of his argument that Federal law was controlling in this situation, the appellant relied on *Hill v. Florida*,<sup>10</sup> wherein the U.S. Supreme Court held two sections of a Florida statute prescribing standards for union officials invalid as conflicting with the National Labor Relations Act. The Court held that the two sections of the Florida statute, which provided among other things that a person who had been convicted of a felony could not hold office in a union, were invalid because they circumscribed the "full freedom" to freely choose a collective bargaining agent, which right is protected by section 7 of the NLRA.<sup>11</sup>

The Court considered congressional approval of the purpose of section 8 to be the principal feature distinguishing the instant case from the holding in *Hill v. Florida*. The Court recounted the long history of investigations by New York and New Jersey into the corrupt practices on the New

<sup>9</sup> *De Veau v. Braisted* (U.S. Sup. Ct., June 6, 1960).

<sup>10</sup> 325 U.S. 538.

<sup>11</sup> Speaking for the Court in *Hill v. Florida*, 325 U.S. 541, Mr. Justice Black stated, "The declared purpose of the Wagner Act [NLRA], as shown in its first section, is to encourage collective bargaining, and to protect the 'full freedom' of workers in the selection of bargaining representatives of their own choice. To this end, Congress made it illegal for an employer to interfere with, restrain, or coerce employees in selecting their representative. Congress attached no conditions whatsoever to their freedom of choice in this respect. Their own best judgment, not that of someone else, was to be their guide. 'Full freedom' to choose an agent means freedom to pass upon that agent's qualifications . . . . To the extent that section 4 limits a union's choice of such an agent or bargaining representative, it substitutes Florida's judgment or the workers' judgment."



York waterfront. These investigations, the Court pointed out, resulted in congressional approval of a compact between the two States to deal with criminal elements then present on the waterfront. The Court conceded that section 8 was not a part of the compact approved by Congress but held that the Congress, in giving its approval to the compact, explicitly authorized supplementary legislation in accord with the objectives of the compact when it provided the authorization for ". . . the carrying out and effectuation of said compact, and enactments in furtherance thereof."<sup>12</sup> The Court concluded that:

"In the light of the purpose, scope, and background of this New York legislation and Congress' relation to it, such an inference of incompatibility has no foundation . . . Here the States presented their legislative program to cope with an urgent local problem to the Congress, and the Congress unambiguously supported what is at the core of this reform. Had section 8 been written into the compact, even the most subtle casuistry could not conjure up a claim of preemption."

The Court pointed out further that the NLRA "obviously" does not exclude every State policy which might restrict the complete freedom of workers to choose their own representatives.

As far as the LMRDA was concerned, the Court stated that it was evident from the language of the act that Congress did not intend to leave the problem of preemption to mere inference. The Court then cited two sections of the act which affirmatively "preserved the operation of State laws": (1) section 604, which provides that nothing in the act shall be construed to impair or diminish the authority of any State to enact and enforce general criminal laws with respect to the groups of felonies, with the exception of exclusively federal violations, listed in section 504(a) and (2) section 603(a), which expressly disclaims the preemption of State laws unless explicitly provided to the contrary. In view of the language of these two sections, it could not be inferred that section 8 of the New York act is preempted by section 504(a) of the LMRDA.

The Court also held that section 8 was not in conflict with the due process clause of the 14th amendment. Barring convicted felons without

subsequent pardons was, according to the Court, a reasonable means for achieving a legitimate aim of a State, i.e., combating corruption on the waterfront.

The Court also held that section 8 of the New York act was not a bill of attainder because it was not a substitution of a legislative determination of guilt for a judicial determination. Section 8 did not determine that a person has committed a felony; it merely provided that a person who had been previously convicted of a felony in a judicial forum could not hold office in a union and expect to collect dues.

The Court also held that section 8 was not an *ex post facto* law because it did not provide punishment for a past act. The purpose or effect of the section was not to punish, but to bar previously convicted felons from a particular office in an effort by the State to eliminate criminal elements from its port.

The dissent argued that the Court was inconsistent in holding, on the one hand, that the Florida restriction on felons was invalid and, on the other hand in, upholding the validity of the restriction in the New York statute. According to the dissent, the Court's reliance on congressional approval of section 8 of the New York act came "to naught" in light of the language of article XV, section 1 of the compact, which expressly stated that "This compact is not designed and shall not be construed to limit in any way any rights granted or derived from any other statute or any rule of law for employees to organize in labor unions, to bargain collectively and to act in any other way individually, collectively, and through labor organizations or other representatives of their own choosing. . . ." The dissent then asked whether it was possible to choose a representative freely and be told at the same time by the New York legislature who may or may not be chosen.

The dissent also pointed out that Congress expressly kept for itself the exclusive control over qualifications for officers of labor unions. This was clear, according to the dissent, from the language of section 2(a) of the LMRDA, wherein Congress assumed the responsibility for protecting the employees' right to choose their own bargaining representatives. The dissent stated that section 604 of the act<sup>13</sup> merely left the States enforcement of their "general criminal laws" unimpaired.

<sup>12</sup> 67 Stat. 541.

<sup>13</sup> See Hearing before Subcommittee No. 3 of the Committee on the Judiciary, House of Representatives (83d Cong., 1st sess.), on H.R. 6286, H.R. 6321, H.R. 6343, and S. 2393, p. 136.

# Chronology of Recent Labor Events

## June 1, 1960

THE Commercial Telegraphers' Union and the Western Union Telegraph Co. agreed on a 2-year contract for 30,000 employees throughout the country (except the New York City metropolitan area), averting a threatened strike and providing for wage increases of 10 cents an hour immediately plus 5 cents on January 1, 1961, for all employees except messengers, who received 5 cents on June 1. Other benefits included a company-financed medical and hospitalization program, an expanded group insurance plan, and more liberal vacations.

On the same day, members of the independent American Communications Association in New York City ratified a similar agreement with the company for about 5,000 workers in the city's metropolitan area.

THE National Labor Relations Board ruled that informational picketing which had the effect of inducing employees of other employers to refuse to cross a picket line violated the Landrum-Griffin Act even though such inducement was not the intended effect of the picketing. The case was *Local 239, International Brotherhood of Teamsters and Stan-Jay Auto Parts and Accessories Corp.*

## June 2

THE U.S. Court of Appeals for the District of Columbia reinstated Lawrence T. Smith as rank-and-file representative on the board of Teamsters' monitors, on the ground of irregular proceedings in Smith's dismissal by U.S. District Court Judge F. Dickinson Letts. (See Chron. item for May 12, 1960, MLR, July 1960.)

On June 16, the appellate court allowed attorneys claiming to represent 200,000 Teamster members to intervene in the original suit which established the monitor board. A counsel for the interveners said their rights were being neglected because the monitors had placed too much emphasis on the charges against Mr. Hoffa.

## June 3

A WAGE ARBITRATION BOARD set up under an agreement between the Brotherhood of Locomotive Engineers (Ind.) and the major railroads announced a binding award, granting employees represented by the union wage increases of 4 percent, 2 percent effective July 1 and the remainder on March 1, 1961. The board also incorporated into the base rate the previously accumulated 17-cent-an-hour cost-of-living allowance but eliminated the escalator clause from the contract.

Subsequently, the award served as a basis of wage settlements between the railroads and the Railway Conductors and Brakemen (on June 4), the Brotherhood of Railroad Trainmen (Ind.) (on June 22), and the Brotherhood of Locomotive Firemen and Enginemen (on June 23). (See also p. 860 of this issue.)

## June 4

THE International Longshoremen's Association reached an agreement with stevedoring companies in five Great Lakes ports—Chicago, Milwaukee, Duluth, Cleveland, and Buffalo—which sent 3,000 dockworkers back to work after a 3-week strike. To run until April 1, 1963, the pact called for annual wage increases varying by port, which will establish a uniform wage rate of \$2.68 an hour by the date of the final increase. (See also p. 862 of this issue.)

## June 5

MEMBERS of the United Auto Workers ratified a 2-year agreement with North American Aviation, Inc., covering 24,000 workers in Los Angeles, Columbus, and Neosho (Mo.) and providing for a wage increase of 7 cents an hour on May 28, 1961. The contract also included extended layoff benefits, continuation of the cost-of-living clause, incorporation of 5 cents of the latest 6-cent-an-hour escalator adjustment into the basic rate, pension plan revisions, and liberalized insurance coverage.

Other settlements in the aircraft industry during the month included those of the Douglas Aircraft Co., Inc., with the UAW and the Machinists, and of the Convair Division of General Dynamics Corp. with the Machinists. (See also p. 860 of this issue.)

THE Association of Air Transport Unions (see Chron. item for Nov. 9, 1959, MLR, Jan. 1960) announced that its seven members had agreed to provide "all possible and practical moral and financial support" to any striking member union and to withhold final settlement from a struck airline until it has guaranteed reinstatement of all strikers. (See p. 861 of this issue.)

## June 6

THE U.S. Supreme Court upheld the constitutionality of a provision of the New York Waterfront Commission Act barring a union from collecting dues if it has an ex-felon for an officer. The case was *De Veau v. Braisted*. (See also p. 856 of this issue.)

## June 9

A 4-YEAR AGREEMENT between Actors' Equity and the League of New York Theatres ended a dispute that had kept 22 New York City theaters shut since June 3. The pact called for increases in minimum weekly salaries, rehearsal pay, and road salaries. A pension plan, to be financed by producers and theater owners, was also agreed upon. (See also p. 863 of this issue.)

AT A JOINT 2-DAY SPECIAL CONVENTION in Pittsburgh, the Pennsylvania State AFL and CIO organizations merged.

Joseph Burke of the AFL and Harry Boyer of the CIO were elected cochairmen of the new organization, which has a total of more than 1 million members. (See also p. 865 of this issue.)

### June 10

ESTABLISHING REGULATIONS under the Landrum-Griffin Act's provision permitting economic strikers to vote in representation elections within 12 months from the beginning of a strike, the NLRB ruled in three companion cases that economic strikers for whom replacements had been hired were not entitled to vote in a representation election held after the strike had ended. The cases were *Martin Bros. Container and Timber Products Corp.* and *Local 530, United Brotherhood of Carpenters*; *Wagner Electric Corp.* and *Local Union 928, International Brotherhood of Teamsters*; and *Canton Sterilized Wiping Cloth Co. and Laundry and Dry Cleaning International Union*.

THE AFL-CIO announced that its executive council had established the Agricultural Workers Organizing Committee to organize workers who cultivate and harvest fruits and vegetables. The Federation's organizing activities among agricultural workers during the past 14 months have centered on California. John W. Livingston, AFL-CIO director of organization, reported that more than 4,000 workers in the Central Valley had become union members and that a union committee had negotiated wage increases with cherry and apricot growers.

### June 12

HOLLYWOOD SCREEN WRITERS ratified the Writers Guild's new 3½-year contract with seven major film producers, ending a strike begun last January 16. The agreement called for a 10-percent increase in minimum wages the first year plus 5 percent starting the third year, a contribution by the studios of \$600,000 to establish pension and welfare funds, and a 2-percent share in income from sale or lease to television of pictures made after the effective date of the contract. Agreements with other producers had been reached earlier.

### June 13

THE U.S. Supreme Court ruled that a jury had the power to decide that financial assistance furnished by the United Auto Workers to a striker constituted a tax-exempt gift within the meaning of section 102(a) of the Internal Revenue Code and that the evidence was adequate to support the conclusion of the jury. The striker, who subsequently joined the union, had received rent and food expenses from the UAW during the Kohler Co. strike in Wisconsin. The case was *United States v. Kaiser*.

### June 19

THE Bethlehem Steel Co. and the Union of Marine and Shipbuilding Workers agreed upon a 3-year contract,

ending a 5-month strike—the longest on record for shipyard workers—which idled 17,000 workers in the company's East Coast shipyards. The settlement provided for a four-step, 25-cent-an-hour wage increase (4 cents immediately). (See also p. 861 of this issue.)

### June 20

IN THREE ARBITRATION CASES, the U.S. Supreme Court laid down the following rules:

*United Steelworkers v. American Manufacturing Co.* In an action to compel arbitration, if the contract calls for arbitration of all grievances regarding the "meaning, interpretation, and application of the contract," the Federal court's function is limited to ascertaining whether the issue in dispute is governed by the contract. The court may not determine the merits of the grievance. (See also p. 853 of this issue.)

*United Steelworkers v. Warrior and Gulf Navigation Co.* A Federal court may not deny an order to arbitrate "unless it may be said with positive assurance that the arbitration clause is not susceptible to an interpretation that covers the asserted dispute. Doubts should be resolved in favor of coverage." (See also p. 854 of this issue.)

*United Steelworkers v. Enterprise Wheel and Car Corp.* A Federal court may not refuse enforcement of an arbitration award merely because its interpretation of the contract differed from that of the arbitrator. (See also p. 853 of this issue.)

### June 24

THE Federal District Court in Cleveland sentenced William Presser, an Ohio Teamster leader, to 8 months in jail for obstructing justice by defacing a document subpoenaed by the Senate Select Committee on Improper Activities in the Labor or Management Field. (See Chron. item for Oct. 20, 1959, MLR, Dec. 1959.)

### June 29

J. H. OLDENBROEK resigned as secretary general of the International Confederation of Free Trade Unions at the organization's executive board meeting in Brussels. The board elected Omer Becu, secretary general of the International Transportworkers Federation, to succeed Oldenbroek on August 1.

A 3-WEEK STRIKE by members of the International Ladies' Garment Workers' Union employed at four Virginia plants of the Kenrose Manufacturing Co. ended when the company agreed to establish a fund to compensate the workers for loss of pay or jobs which might result from competition from an Irish factory in which the firm recently acquired an interest. The company agreed to pay into the fund 30 cents for every dozen housedresses shipped to this country from the factory in Cork City, Ireland. (See also p. 864 of this issue.)

# Developments in Industrial Relations\*

## Negotiations and Other Wage Developments

**Railroads.** Wage settlements covering about 150,000 members of two unions—the Brotherhood of Railroad Trainmen (Ind.) and the Brotherhood of Locomotive Firemen and Enginemen—were negotiated during the second half of June. Work rules were a separate issue, still to be resolved. Both wage agreements followed the pattern set by the binding arbitration award covering the Brotherhood of Locomotive Engineers (Ind.) announced early in the month.<sup>1</sup> The contracts called for a 4-percent raise in two steps: 2 percent effective July 1, 1960, and the balance effective March 1, 1961. The current 17-cent-an-hour cost-of-living allowance was incorporated into the basic rate structure, but the cost-of-living escalator clauses were discontinued.

On June 8, a Presidential Emergency Board, appointed by President Eisenhower to study the wage dispute between the Nation's carriers and 11 nonoperating rail brotherhoods, recommended a 5-cent-an-hour pay increase for more than 500,000 workers. The Board's recommendations, unlike the arbitration decision handed down in the case of the Locomotive Engineers, were not binding. The increase, if accepted by the railroads and unions, would become effective July 1, 1960. The Board also suggested incorporation of the existing 17-cent-an-hour cost-of-living allowance into base rates and discontinuance of escalator clauses. The recommendations differed from the arbitration decision in not proposing a general pay raise for 1961; instead, the Board suggested that the parties negotiate increases in health and welfare benefits, improvements in vacation schedules, and some liberalization in paid holiday provisions. The supplementary benefit recommendations included increasing welfare benefits for dependents to equal those for employees, payment of the full costs of occupational injury or illness (under the Federal Employees' Liability

Act up to 75 percent is now paid by the carrier), establishment of group life insurance, and reduction in the eligibility requirements for a second week of vacation from 5 to 3 years' service.

**Aircraft.** The United Automobile Workers and the International Association of Machinists negotiated contracts during June covering more than 75,000 employees of two major aircraft producers—Douglas Aircraft Co., Inc., and the Convair Division of General Dynamics Corp. The 2-year contracts between Douglas and the unions provided for a 7-cent general increase, to become effective in the second contract year, for the 50,000 workers affected. No general wage increase was negotiated for the first year; in lieu thereof, the parties agreed upon improvements in fringe benefits—higher pension benefits (to \$2 a month for each year of service instead of \$1.75); and liberalized health and welfare benefits. In addition the UAW pacts provided for extended layoff benefits ranging up to \$500, while the IAM negotiated a savings-severance-pay plan, with joint contributions by employer and employees, which pays benefits in the event of layoff, retirement, or death. Contracts with both unions continued cost-of-living escalator clauses, with a revised schedule omitting the next 1-cent step increase.

Convair and the IAM on June 17 agreed upon contract terms for about 26,000 workers in California, New Mexico, and various Atlas Intercontinental Ballistic Missile bases and test sites in other States. The IAM had struck the missile bases on June 5, and had staged 1-day walkouts at some other Convair plants. This agreement provided wage increases totaling 7 cents an hour over the 2-year contract period, with 4 cents effective immediately and an additional 3 cents in 1961. The quarterly cost-of-living escalator clause was revised to provide a lump-sum payment at the end of the first year, with quarterly payments resumed for the second year. In addition, employees laid off for at least 4 weeks will receive benefits of \$50 for each year of service, up to a \$500 maximum.

Beech Aircraft, Inc., and the IAM announced June 7 a 2-year contract providing a 2.5-percent

\*Prepared in the Division of Wages and Industrial Relations, Bureau of Labor Statistics, on the basis of currently available published material.

<sup>1</sup> See Monthly Labor Review, July 1960, p. 735.



wage increase for 5,500 workers. The increase, effective June 6, ranged from 5 to 8 cents an hour at plants in Wichita, Liberal, and Herington, Kans. A reopener is provided for 1961. The cost-of-living escalator clause was continued, reportedly on a modified basis.

In Cleveland, wage increases ranging from 6 to 9 cents an hour went into effect on June 1, 1960, for about 7,000 employees of Thompson Ramo Wooldridge, Inc., represented by the independent Aircraft Workers Alliance. The 3-year contract, agreed upon in May, also included higher pay for shift work, an eighth paid holiday, and improved vacations and pension benefits. Wage reopeners are scheduled for the second and third years.

*Airlines.* Developments in the airline industry during June included an unauthorized walkout by some members of the Air Line Pilots Association and the signing of a mutual aid pact among seven unions. The latter action was announced on June 5 by the recently formed Association of Air Transport Unions,<sup>2</sup> as an answer to a mutual financial strike assistance pact agreed upon by major airlines in October 1958.<sup>3</sup> In addition to "all possible and practical moral and financial support" during a strike, the unions agreed to "withhold final settlement with a struck employer until he has signed a written contract guaranteeing full and immediate reinstatement of all striking employees." According to the association, the plan was "timed to become effective during this year's major negotiations in the air transport industry."

Meanwhile, the Civil Aeronautics Board on June 21 ordered a second investigation of the airlines' assistance pact to determine its "legality and desirability." Six airlines—American, Capital, Eastern, Pan American, Trans World, and United—originally signed the agreement but in the spring of 1960, Braniff, Continental, National, and Northwest also joined and the pact was broadened, subject to CAB approval, to cover strikes that do not involve a Presidential Emergency Board. Objections to the expanded agreement had been filed by several unions both individually and through the Association of Air Transport Unions. The Board said it would in-

vestigate the extent to which the carriers are developing long-term mutual labor relations arrangements, their impact on industry employment, and other matters.

Jet flights of two airlines were hampered during June in a dispute between the pilots and the Federal Aviation Agency over the occupancy by agency inspectors of the seat directly behind the captain. The FAA had declared that the occupancy of that seat was essential to observing crew performance, whereas the pilots maintained that safety requires a third pilot in the seat. Eastern Air Lines and Pan American World Airways were the only two lines that had to cancel any of their flights, as their pilots called in sick (despite a return to work order by the Air Line Pilots Association). The walkout ended on June 21, apparently because of pressure from union headquarters and Federal court injunctions. The Pilots union said it was preparing to contest the FAA regulation in court.

*Shipyards.* The East Coast shipbuilding division of Bethlehem Steel Co. and the Industrial Union of Marine and Shipbuilding Workers, representing about 17,000 workers, tentatively agreed upon a contract on June 19—thus ending a strike in effect since late January 1960. According to a local union official, the 3-year settlement, subject to members' ratification, called for a total of 25 cents an hour in wages, as well as improvements in pensions and insurance benefits. Wages were to be increased 4 cents an hour effective immediately, and 5 cents more on August 1, 1960; 11- and 5-cent raises are scheduled for August 1 of 1961 and 1962, respectively. Life insurance benefits were raised \$500, to \$5,000, and pension provisions were changed to provide minimum monthly benefits of \$2.50 for each year of service for employees retired before January 1, 1960, and \$2.60 for those retiring after that date. (Previously, benefits had accrued at \$2.40 a month for service prior to November 1957.) The agreement reportedly strengthened seniority and job security provisions, which had been the chief issues. Recall rights were lengthened from 2 years to 5 years.

*Longshoring.* On the West Coast, the International Longshoremen's and Warehousemen's Union (Ind.) and the Pacific Maritime Association

<sup>2</sup> The organization consists of the Machinists, Pilots, Transport Workers, Dispatchers, Railway and Steamship Clerks, Flight Engineers, and Automobile Workers.

<sup>3</sup> See Monthly Labor Review, January and March 1959, pp. 62 and 304.

negotiated wage raises under a reopening clause of their contract affecting 17,000 workers.<sup>4</sup> The increases, negotiated on June 13, amounted to 8 cents an hour for longshoremen and 9 cents an hour for shipping clerks. Two issues remained to be settled as the talks continued: one over the union's demand for more money in the employer-paid mechanization fund agreed upon in July 1959<sup>5</sup>; and the other over the ILWU's demand for a reduction in the maximum length of the work shift.

An agreement to end a 3-week walkout of 3,000 longshoremen employed at five Great Lakes ports was reached on June 4 by representatives of the International Longshoremen's Association and stevedoring companies serving Chicago, Milwaukee, Cleveland, Buffalo, and Duluth. The contracts, running until April 1, 1963, provided for varying wage increases which will result in a uniform base pay of \$2.68 an hour at all ports by the date of the final wage increase. At Chicago, rates will rise 15 cents an hour this year, 11 cents next year, and 9 cents in the third contract year; fringe benefit improvements were valued at 7 to 8 cents an hour—a total package of 42 to 43 cents. At other ports the wage and fringe benefit increases ranged from 40 cents an hour in Cleveland to 69 cents in Milwaukee and Duluth.

**Government.** Pay raises for 1.5 million postal and Federal white-collar employees were enacted by the Congress on July 1, 1960, when it overrode President Eisenhower's veto. Increases for white-collar workers amounted to about 7.5 percent, but those for the 535,000 postal workers averaged about 8.4 percent, with some postal workers receiving up to 8.8 percent. Minimum salary scales, effective with the first payroll period beginning on or after July 1, 1960, for the 980,000 white-collar employees range from \$3,185 to \$18,500 per year, compared with a previous range of \$2,960 to \$17,500. The previous general increase for these workers—approximating 10 percent—was enacted 2 years ago.<sup>6</sup>

**Glass.** The Libbey-Owens-Ford Glass Co. and the United Glass and Ceramic Workers announced in late May that they had agreed to extend their contract for 1 year, to October 25, 1961. The extension agreement—affecting about 10,000

workers—called for various improvements in pensions and insurance benefits and for a wage increase in October of this year. The wage raise, limited to nonbonus production and maintenance workers, will amount to 4 cents an hour. According to the union, further wage adjustments, up to an overall cost of 1 cent a man-hour, will also be made in October.

Effective May 1, 1960, the pension plan was liberalized to provide benefits for employees retiring after October 1, 1958, at \$2.40 a month instead of \$2.25 for each year of past service prior to January 1, 1958, plus \$2.33 for service during 1958; future service credit remained unchanged at \$2.50 a month per year of service beginning January 1, 1959. Benefits for employees retired prior to October 1958 were raised to \$2.35, from \$2.20, for each year of service. In addition, these retirees were to receive an annual payment of \$20 to help defray any hospitalization cost. Health and welfare changes included higher life insurance, weekly sickness and accident benefits of \$50 (instead of \$30 as in the past), and increased hospitalization and medical benefit allowances.

The union also negotiated a 1-year extension of a contract to February 16, 1962, with the Pittsburgh Plate Glass Co., which generally followed the terms of the Libbey-Owens-Ford settlements. The Pittsburgh Plate Glass agreement—also covering about 10,000 workers—increased fringe benefits and called for an average 4-cent-an-hour pay raise for nonbonus and nonincentive workers, effective February 16, 1961.

**Trade.** One-year contracts reportedly calling for 21-cent-an-hour wage increases were agreed upon in early June by the Teamsters and the ILWU with two employer associations—the Distributors Association of Northern California and the San Francisco Employers Council. The contracts affected about 9,000 warehousemen in the San Francisco Bay area and provided the largest single pay raise ever negotiated by these groups. It was the first time the two unions had coordinated bargaining strategy and conducted joint negotiations. The settlement was expected to set the wage pattern for an additional 16,000 warehousemen in northern California.

<sup>4</sup> See Monthly Labor Review, September 1959, p. 1027.

<sup>5</sup> See Monthly Labor Review, July 1960, p. 737.

<sup>6</sup> See Monthly Labor Review, August 1958, p. 899.

The Meat Cutters and Butcher Workmen in late May agreed on 2-year contracts with supermarkets of the Great Atlantic and Pacific Tea Co. in the New York City metropolitan area. Over the life of the agreement, wages will rise by \$10 a week for journeymen butchers, \$8 for full-time clerks, and 25 cents an hour for part-time employees. The contract also included improved health insurance benefits.

**Telephones.** Weekly wage increases ranging from \$1 to \$4.50 were provided in agreements negotiated in June by the Chesapeake and Potomac Telephone Cos. of Virginia and West Virginia and the Communications Workers of America. The 3-year agreements, affecting about 10,000 plant, accounting, and traffic department employees, followed the Northwestern Bell Telephone pattern<sup>7</sup> on pensions, vacations, group life insurance, and a major medical plan. Wage reopeners are scheduled for the second and third contract years.

Similar wage increases and fringe benefits were included in a contract reached on June 20 by the Pacific Telephone and Telegraph Co. and the CWA. The agreement, subject to union ratification, affected about 17,000 plant and traffic department employees in northern California and Nevada.

**Entertainment.** Agreement to reopen Broadway theaters, shut down since June 2 over a contract dispute between the Actors' Equity Association and the League of New York Theatres, was reached on June 9. The pension plan agreed upon, resolving a major issue in the dispute, was to be financed by payments from the producers and theatre owners. Producers will contribute 1 percent of the actors' payroll beginning in the second contract year and 2 percent starting in the fourth year. Theater owners will pay the equivalent of 1 percent of actors' payroll each of the 6 contract years. The issue of pension contributions for actors earning more than \$500 a week was to be arbitrated.

The 4-year wages and working conditions agreement called for raises in weekly minimums totaling \$14; by the third year, the minimum New York pay will be \$117.50 a week. Other contract

changes included higher road salary minimums and rehearsal pay plus more liberal per diem allowances. About 1,000 actors as well as 4,000 stage hands and other technicians were idled by the dispute.

A much longer contract dispute in the entertainment industry—between the Writers Guild of America (Ind.) and the Association of Motion Picture Producers—ended on June 12. The Writers had been on strike against both the movie producers and the Alliance of Television Film Producers since mid-January. Agreement with the TV producers was expected shortly. At issue, as in the Screen Actors Guild strike, which was settled in April,<sup>8</sup> was a demand for a portion of income from movies sold or leased to television.

Generally, the settlement was along the same lines as that with the Screen Actors, with the producers agreeing to set up a pension and health and welfare program. They will make an initial \$600,000 payment and contribute 5 percent of each writer's salary up to a maximum of \$100,000 a picture. The 42-month contract calls for writers to receive 2 percent of the income from the sale or lease to television of movies started during 1960 or thereafter. It also provided for a 10-percent increase in minimum wages the first contract year and an additional 5 percent starting the third year.

**Construction.** Pay increases totaling 65 cents an hour over a 3-year period for about 50,000 construction workers in the New York City area were agreed upon early in June. The contracts covered carpenters, cement masons, operating engineers, metal lathers, laborers, and cement and concrete workers employed by members of the Building Trades Employers Association. The contracts provide increases of 15 cents an hour effective July 1, 1960, three additional 10-cent raises at 6-month intervals, and a final 20-cent raise on July 1, 1962. An additional 5-cent-an-hour increase was to be applied to fringe benefits. To offset part of the rise in construction costs, the unions reportedly agreed upon the elimination of Lincoln's Birthday as a paid holiday and other changes. Carpenters, the largest single group affected, will earn \$5.05 an hour by the date of the final wage increase.

A separate 2-year contract reportedly providing a package of 56 cents an hour for 9,000 bricklayers

<sup>7</sup> See Monthly Labor Review, June 1960, p. 632.

<sup>8</sup> See Monthly Labor Review, June, 1960, pp. 632-633.



in the area was also agreed upon. An unusual feature of this contract was the allocation of 1 cent of the package to establish an industry promotion fund, which, according to the president of the Associated Brick Mason Contractors of Greater New York, will be used to encourage wider use of brick for exterior facing, in lieu of prefabricated materials such as sheet steel, aluminum, and glass.

A 15-cent-an-hour pay increase for 12,000 construction laborers in western Pennsylvania was agreed upon in June by the Master Builders Association and the International Hod Carriers', Building and Common Laborers' Union of America. The 1-year contract, effective June 1, 1960, brought the laborers' scale to \$2.725 an hour.

*Other Actions.* On June 13, the International Union of Electrical, Radio and Machine Workers presented its collective bargaining demands to the General Electric Co., with which its contract expires on September 30. The union's proposals included a minimum 3.5-percent wage increase, supplemental unemployment benefits, full payment by the company of the costs of pensions, health and insurance benefits, and improved holiday and vacation provisions. The union also proposed that in the event of a plant transfer, displaced employees be given priority on jobs at the new plant and that the company pay part of the employees' moving expenses. The proposed contract would run 1½ to 2 years; the current pact, negotiated in 1955, was for 5 years.<sup>9</sup>

A threatened work stoppage at some or all of 10 New York City voluntary, nonprofit hospitals by technical, clerical, and other nonprofessional employees, members of local 1199 of the Retail, Wholesale and Department Store Union, was averted on June 30, 1960, through a peace formula evolved under the auspices of Mayor Robert F. Wagner. The dispute centered on dissatisfaction with a "statement of policy" that resulted from a strike which had curtailed services at seven hospitals in 1959.<sup>10</sup> That statement, signed by all but 2 of the 82 hospitals represented by the Greater New York Hospital Association, had provided wage increases, established grievance machinery, and set up a 12-man committee to review annually such items as wage levels, fringe benefits, seniority rules, and personnel practices. Union recognition was not included in the settlement.

Under the new peace formula, the annual review committee will consist of six public members. (Previously the panel was made up of six hospital trustees and six public representatives.) In addition, six consultants (three designated by the hospital association and three by the Central Labor Council) will advise the committee, although none of the consultants will have voting power.

The Monsanto Chemical Co. announced a 3-year stock-option plan under which its 22,000 salaried and hourly employees may buy common stock at 95 percent of the average of the high and low values on June 3, 1960. Under the plan—limited to 450,000 shares—employees may allocate up to 10 percent of their monthly pay to build a fund for eventual exercise of the option. The company will pay 4 percent interest, compounded semi-annually, on the deposited funds. Stock options may be exercised beginning July 1961, and at 6-month intervals thereafter.

In early June, about 1,200 employees of the Kenrose Manufacturing Co., which makes house-dresses at four plants in Roanoke, Radford, and Buchanan, Va., struck in protest of the company's acquisition of an interest in a dress factory in Ireland without guaranteeing its domestic employees protection against loss of jobs or wages resulting from exports to this country. The strike, conducted by the International Ladies' Garment Workers' Union, marked the first time a needle trades union had taken action towards enforcing its policy of combating the mounting competition presented by goods imported from low-wage areas. David Dubinsky, ILGWU president, emphasized that the union did not challenge the company's right to expand operations by establishing foreign affiliates but was concerned over the company's alleged utilization of low-cost labor "at the expense of Virginia workers."

The dispute ended on June 29, when the company agreed to pay 30 cents into a special fund for every dozen dresses shipped to the United States from the new factory in Cork City, Ireland (up to a total of \$30,000 a year). Workers whose jobs or earnings may be adversely affected by the Irish operation are to be compensated from the fund; any money remaining at the end of the 2-year contract is to be returned to the company.

<sup>9</sup> See Monthly Labor Review, October 1955, p. 1170.

<sup>10</sup> See Monthly Labor Review, August 1959, pp. 914-915.



## Union Developments

Nine major unions in New York City announced in June plans to organize a nonprofit corporation to operate a chain of drug stores. According to a union committee, the stores would sell prescription drugs as much as a third less than current retail prices for participating union members and their families. The program drew objections from six associations of retail druggists and from local 1199 of the Retail, Wholesale and Department Store Union, representing registered pharmacists and clerks, which charged that the plan would force many pharmacists out of business.

On June 9, 1960, the AFL and CIO State organizations of labor in Pennsylvania merged at a convention in Pittsburgh, leaving New Jersey the only State in which the two groups have not consolidated. The Pennsylvania State AFL-CIO, uniting more than 1 million workers, is composed of about equal numbers of former AFL and CIO unions and is presided over by two cochairmen—Joseph F. Burke and Harry Boyer, former AFL and CIO members, respectively. They will serve until 1962, when a president and an executive vice president will be elected.

In a biennial secret-ballot election conducted by the Honest Ballot Association, Joseph E. Curran was reelected president of the 40,000-member

National Maritime Union. Mr. Curran, president of the union since its founding in 1937, received 18,949 votes to 2,024 for Stanley A. Walker of New Orleans and 1,410 for Albert J. Tiger of San Francisco.

Members of the National Postal Transport Association union rejected, by a vote of 10,246 to 5,958 in a mail referendum, a proposal to merge with the Letter Carriers. In the same referendum, NPTA President Paul A. Nagle was reelected to office by a relatively close margin—8,915 votes to 8,098 for Robert A. Rice, of Burlington, Wis. Mr. Nagle has been a strong advocate of merger of the two unions as well as for eventual amalgamation of all postal unions.

About 1,000 employees of Horsman Dolls, Inc., faced with a permanent shutdown of the Trenton, N.J., plant, succeeded in early June in saving their jobs by raising enough money to buy the company. The plant, operated by Botany Industries, Inc., was reportedly scheduled to close July 1, 1960, because of high labor costs. To seal the transaction, the employees, who are members of the International Union of Electrical, Radio and Machine Workers, had raised more than \$500,000 from their welfare fund and from pledges. Additional amounts, to cover the balance of the loan still owed by Botany to the plant's previous owners, were to be raised by a bond issue.

# Book Reviews and Notes

EDITOR'S NOTE.—*Listing of a publication in this section is for record and reference only and does not constitute an endorsement of point of view or advocacy of use.*

## Special Reviews

*Health Plans and Collective Bargaining.* By Joseph W. Garbarino. Berkeley, Calif., University of California Press, 1960. 301 pp. \$5.

The American people generally agree on major goals but differ spectacularly on what methods to use in achieving them. This pluralistic quality is particularly apparent in the variety of methods devised to provide adequate medical care; and nowhere in the country has ingenuity in this field been exercised more prolifically than in California.

This volume traces the development of many different arrangements to provide hospital and medical care through collectively bargained plans, and the impact that such plans have had on established systems of organizing and financing health care. Illustrative examples are drawn primarily from experience in the San Francisco Bay Area in the decade following 1949, when rapid growth in negotiated health plans began.

When employee health benefit plans were first established, most management and labor representatives had, at best, a rudimentary knowledge of the complex problems involved. The fact that plans were generally established without careful study has tended over the years to intensify these problems. Mr. Garbarino suggests that attention should now be turned to improving the functioning of the plans, a task requiring personnel with considerable specialized knowledge.

The author notes that management and labor control a substantial part of the total flow of funds into the medical market and that "their decisions on a wide range of questions of medical economics could have far-reaching consequences." The fact is that these decisions, even when made unthinkingly, without real knowledge, *do* have far-reaching

consequences for the community and for those directly a party to the collective bargaining agreement. For example, the way in which the structure of benefits agreed upon can influence the cost of a program is suggested by recent studies indicating that provision of home nursing service, where possible, instead of hospitalization in the latter stages of recovery, cuts the average hospital stay and the utilization of more costly in-hospital care.

Much of the book is devoted to outlining the principal results of the introduction and proliferation of negotiated health plans. There is little question that through collective bargaining health benefits have been extended to large numbers of individuals who otherwise would not have been covered, and that benefits have been increased and broadened in scope.

Another effect of collectively bargained health plans, according to the author, has been to increase the unit costs of health care, though "the degree of fee inflation attributable to the existence of insurance is probably generally exaggerated." Indeed, the rapidly rising costs of construction, labor, and goods and services, and the new, more expensive methods of treatment would seem to exert more direct upward pressure on costs of hospital care than the expanded demand brought about by the availability of insurance.

A more serious charge concerning the inflationary effects of employee health benefit plans is that they tend to push up total costs by encouraging "abuse." This is a term loosely used to encompass such practices as the provision of unnecessary medical services or the raising of fees for insured patients. "Controls" introduced by insurance companies, such as deductibles and co-insurance, have not been successful, as proponents of these devices have ruefully admitted. The author suggests that traditional mechanisms of the medical profession, such as county societies' "grievance committees," have also generally been ineffective in curbing all but the most flagrant abuse.

Unions are particularly concerned with rising costs, which absorb gains won in bargaining that might otherwise be used to purchase broader benefits. This is one of the considerations that have led unions to press for a role in determining how health care is to be organized—a movement with which the author is generally sympathetic. Much of the interest of the book lies in descriptions of

the diverse methods used by unions in the San Francisco Bay Area to alter existing relationships among consumers, suppliers of service, and insuring agencies.

Mr. Garbarino has written a useful book that is clear and well organized. It seems that some of his comments and conclusions, based on conditions in the highly atypical San Francisco Bay Area, require qualification before being applied generally. For instance, the absence of large employers and the predominance in the area of multiemployer "trust fund" health benefit plans, in the administration of which union representatives are characteristically active, may account for his repeated emphasis on unions as "the dynamic element" in jointly bargained health insurance matters.

The author concludes with the prediction that a variety of factors—not the least of which is the erosion of the community-rating concept caused by the introduction of experience rating—point to "a substantial expansion of governmental participation in the distribution of medical care." He believes, however, that for the indefinite future private health plans will continue to play a very substantial role.

—THEODORE ALLISON

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Blue Cross Association

*The Health of People Who Work.* Edited by Albert Q. Maisel. New York, National Health Council, 1960. 268 pp. \$4.50.

This book is a report of the 1959 National Health Forum of the National Health Council concerning the challenges of occupational health. It is an excellent compilation of facts and expert opinions expressed by leaders in industry, labor, and the health specialties on the importance of the health of the worker and the methods and techniques by which his health may be maintained. A most important contribution of the book is its clear presentation of what a good health program in industry should be. Attention is also drawn to new threats to health—both physical and mental—that are to be found in new products, new forms of energy, and new patterns of production and distribution. The costs of ill health to industry and to the worker are discussed, as well as the costs of in-plant medical services designed to reduce employee ill health. Chapters are devoted to the control of the health hazards of the working environment, special problems of the smaller plant,

and the placement of workers in relation to their physical capacities. The section devoted to the emotional problems of employees is handled with particular skill and is recommended reading to all at management and supervisory levels. Two of the industry's most pressing problems, the preparation of the worker for retirement and the relationship of occupational medicine to health insurance, are effectively presented.

The Forum discussions give special attention to the expansion of company financed sick-benefit programs and medical care insurance. A very plausible case is made for the conclusion that apart from humanitarian reasons industry has such a large financial stake in the health of its workers that it cannot afford *not* to have a medical program. It is pointed out that health is not only good business but is also big business; the magnitude of the cost of ill health among workers makes it so. The Forum reported that occupational health services exist in the majority of the 8,000 plants in the United States employing more than 500 workers each. But of the 3 million small business establishments which have fewer than 500 workers, only a small number have as yet succeeded in establishing in-plant services that go beyond the most elementary provisions for first-aid care. It was concluded that if medical programs were good for large businesses, they should be good for small businesses as well.

In addition to giving an accounting of the economic benefits to be derived from occupational health services, the participants turned their attention to the effect of occupational health programs upon management-labor relations, employee morale, and the public's image of the company.

This book is clearly useful to those whose work involves cooperation with business in protecting the health of workers—labor negotiators, public health officials, and voluntary health agency executives. It is essential reading for all in management who are responsible for company policy. Executives of companies without medical departments will be motivated to ask "Why not?"; those in companies with medical departments may be led to inquire whether their own services meet the standards and scope so well described in the book.

—DAVID H. GOLDSTEIN

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*Life and Health Insurance Handbook.* Edited by Davis W. Gregg. Homewood, Ill., Richard D. Irwin, Inc., 1959. xxxiii, 1060 pp. \$14.50.

With the assistance of 109 authorities, Davis W. Gregg, president of the American College of Life Underwriters, has gathered a comprehensive guide to practices and procedures in the United States and frequently in Canada in the life and health insurance fields. The six basic sections of the handbook cover personal life insurance, life insurance for business purposes, programing and estate planning, health insurance, life underwriting and sales management, and the institution of life insurance. Many sample forms are presented in the appendixes, as well as examples of such items as a group life master policy, modes of settlement designation, and a basic table for programing. Also included is a detailed comparison of the five temporary disability benefit laws in the United States and a summary of State workmen's compensation laws.

This handbook is designed to be a practical tool for insurance practitioners, lawyers, accountants, and trust officers and an integrated textbook of principles for the serious students. For those individuals and for the person engaged in industrial relations, it will serve as an excellent introduction to the basic tools and approaches in life and health insurance. The broadly based list of newly developed background readings will also be helpful.

As with many technical subjects, confused terminology is evident. Dr. Gregg hopes, however, that his second edition will reflect the results of the efforts of the Commission on Insurance Terminology, which is working on this problem.

Because the book is written by many practitioners in the insurance field, the biases of the writers are reflected, but all too often, unfortunately, these are not made explicit. For example, William T. Beadles (a vice president and dean of Illinois Wesleyan University), the author of the chapter on term insurance, in a section called Sales Suggestions for Conversions, implies the need to urge that term insurance be converted to more permanent (and more expensive) forms of insurance. He cites only one advantage of term insurance, its low cost, and then directs the reader to the ordinary life and endowment policies as more desirable alternatives. However, examination of the lapsed and surrendered policy record

of most companies shows that so-called permanent insurance is very impermanent. Adding the costs of policy loans to the current premium results frequently in inordinately high costs for the reduced insurance then in force—a major factor in the impermanence of "permanent" insurance. Further, his cost comparison of term and ordinary life insurance is misleading on at least two counts: (1) during the 10-year period, the amount of life insurance in the term policy remains constant while that of the ordinary life decreases as the cash values build up; and (2) the total net cost of the insurance clearly should cover the interest a term insurance purchaser could earn by investing the saving in premiums at appropriate current interest rates.

Authors of other sections show similar biases. Nevertheless, the contributors have approached their task honestly and have, for the most part, written clearly and concisely a comprehensive description of their assigned sections.

From an interesting chapter on dividends, one learns a dramatic fact: Dividends are not earnings but a return of the excess premium paid by the policyholder, reflecting the fact that premiums paid for life insurance were larger than necessary.

The chapters on risk selection and the insurance of substandard risks do not discuss the rather common discriminatory practices and treatment of nonwhite risks.

Moving to the group insurance coverages, the handbook covers group life insurance and pensions—both individual pension trusts and group annuities, deposit administration plans and trustee plans. As an example, Edwin Shields Hewitt ably discusses trustee plans and suggests a framework within which to evaluate a trustee versus an insured plan.

The role and structure of the health insurance industry is described with special emphasis on the commercial carriers. A chapter by O. D. Dickerson is devoted to Blue Cross and Blue Shield. There is even a chapter on the programing of health insurance. Disability income insurance and government health benefits conclude this major section.

Many other fascinating chapters help round out Dr. Gregg's broad survey of the multitudinous aspects of life and health insurance.

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Inland Steel Company



1877: *Year of Violence*. By Robert V. Bruce. New York, Bobbs-Merrill Co., Inc., 1959. 384 pp. \$5.

Professor Bruce's incisive and vivid account of the great railroad strike of 1877 explains its effect in making the United States aware of the emerging social and economic realities confronting the Nation. Once and for all, the concern with the Civil War and reconstruction policies was overshadowed. Instead, there was clearly delineated the impact of the emerging corporate form of organization, first developed extensively in the railroad industry, on a growing industrial work force. The great strike was lost by the railroad workers, but it served, as Samuel Gompers expressed it many years later, as "the tocsin that sounded a ringing message of hope to us all."

Four years of depression had preceded the 1877 strike. Economic dislocation and speculative overexpansion had put 76 railroads into receivership. Freight was sought at any price, with railroad management seeking to maintain dividends. Already receiving low wages, railroad workers were now confronted with further wage reduction. It was rumored that the trunk lines had accompanied a traffic pooling scheme with an arrangement to pool the effects of any strike resulting from the proposed wage reduction. The reaction was a strike which began on the Baltimore & Ohio in West Virginia, and fanned out to railroad centers in Baltimore, Pittsburgh, Chicago, San Francisco, and New Orleans. It reached its height in Pittsburgh, where widespread resentment against the Pennsylvania Railroad's indifference to that city's interests, coupled with ineptness on the part of railroad officials and State authorities, resulted in a holocaust of violence and destruction.

As Professor Bruce makes clear in his painstaking and impressive analysis, the strike became the vehicle for the expression of disaffection going far beyond the railroad workers. Tramps and youngsters were prominent in the mobs which engulfed the railroad workers. The viselike effect of the depression which had begun in 1873 had made for unbearable economic conditions for the growing industrial population of the country. Still largely in its incipient stages, industrialization was being hastened by the rapid development of the transportation network of the country. Depression and accompanying wage cuts were not

the only predisposing factors to the events that surrounded the railroad strike. There was also the heritage of violence and terrorism which accompanied the Civil War and the postwar government of the Southern States, widespread contempt for law and accompanying juvenile delinquency, and a widespread force of uprooted jobseekers who were the offspring of the developing industrial society. Marxism was also a factor, particularly in St. Louis where the Workingmen's Party played a central role during the strike.

The part played by President Hayes in the strike is of particular significance in the history of the development of a national labor policy. While Federal troops were utilized, President Hayes maintained a circumspect position. He would only provide troops to protect Federal property or at the request of a State which was incapable of meeting the situation, resisting pressures of some prominent railroad officials for the President to call out volunteers and in effect to force the operation of the railroads. Commenting on charges that radical influences were behind the strike, Hayes countered that he did not view the strikes as evidence of the prevalence of "a spirit of Communism, since their [the strikers] attacks had not been primarily directed against property in general, but merely against that of the railroads with which the strikers had had difficulties." It is significant that such an effort at viewing a difficult situation in perspective was made even at this relatively primitive stage in labor-management relations in the United States.

—JOSEPH P. GOLDBERG

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*Communism in India*. By Gene D. Overstreet and Marshall Windmiller. Berkeley, University of California Press, 1959. 603 pp., bibliography. \$10.

This volume is a comprehensive and detailed historical survey of the Communist Party in India (CPI). Part I is a report on the origin and development of the Indian Communist Party from its beginning after World War I to 1958. Part II describes the structure of the party and its policies and practices, with particular emphasis on the recent period. Throughout this study, the authors present the interplay of the CPI as an

element of the international Communist community on the one hand, and as an element of the Indian community on the other. This dual role has often required the CPI to follow policies designed to advance the aims of international communism, and which, failing to correspond to the political realities and needs in India, seriously damaged the party's chances of gaining political power.

After World War I, the nationalist movement was the major political force in India, and its main instrument was the Indian Congress Party headed by Mahatma Gandhi. However, the Congress Party was not without political rivals, and there were elements which could not be incorporated in it. Ample opportunities for political activities could be found in the fields of labor and peasant agitation, among minority groups such as the Muslims, and among many other groups with strong cultural and linguistic loyalties. The formation and growth of the Communist movement was in this environment.

The authors describe in detail the structure and functions of the CPI; its attempts to gain control of mass organizations, such as trade unions and peasants' parties, which are the source of the party's political power, and front organizations, which work under the influence, but not the leadership, of the party. They also tell of the party's engaging in parliamentary activity, which provides yet another means of educating and influencing the masses. A final section of the book presents the Communist's evaluation of the role of Mahatma Gandhi and the challenge posed by Gandhi and Gandhism to the achievement of Communist objectives in India.

In their conclusions, the authors point out that, throughout its history, the Indian Communist Party has never achieved the monolithic structure which is the Communist ideal. Not only has there been official deviation in defiance of international Communist policy, but there have also been such acute and abiding factional divisions within the CPI that they could be resolved only by international Communist edict. Furthermore, there has been open revolt against the leadership of the CPI and also a lack of discipline within the ranks. Yet, despite these divisive tendencies, Communist ideology and loyalty to the international Communist leadership have provided internal bonds which have held the party together

with few defections, which differentiates it from other political parties in India.

In attempting to predict the future course of the CPI, the authors take into consideration the effect upon the party of its success in Kerala, in 1957, in rising to power by democratic processes, the reexamination of accepted Marxist and Leninist theory by some Indian Communist leaders, and their more realistic appraisal of the Indian environment.

Biographical data concerning leading Indian Communists appear in an appendix of the book and further add to an understanding of the CPI's relationship to other political movements and to the Indian environment of which it is a part.

—MARIE J. LECLAIR

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# Current Labor Statistics

## CONTENTS

### A.—Employment

- 876 Table A-1. Estimated total labor force classified by employment status, hours worked, and sex  
877 Table A-2. Employees in nonagricultural establishments, by industry  
881 Table A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry  
885 Table A-4. Unemployment insurance and employment service programs, selected operations

### B.—Labor Turnover

- 886 Table B-1. Labor turnover rates, by major industry group

### C.—Earnings and Hours

- 889 Table C-1. Gross hours and earnings of production workers, by industry  
901 Table C-2. Average overtime hours and average hourly earnings excluding overtime of production workers in manufacturing, by major industry group  
902 Table C-3. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities  
902 Table C-4. Gross and spendable average weekly earnings of production workers in manufacturing, in current and 1947-49 dollars

### D.—Consumer and Wholesale Prices

- 903 Table D-1. Consumer Price Index—All-city average: All items, groups, subgroups, and special groups of items  
904 Table D-2. Consumer Price Index—All items and food indexes, by city  
905 Table D-3. Indexes of wholesale prices, by group and subgroup of commodities  
907 Table D-4. Indexes of wholesale prices, by stage of processing and durability of product

### E.—Work Stoppages

- 908 Table E-1. Work stoppages resulting from labor-management disputes

### F.—Work Injuries

- Table F-1. Injury-frequency rates for selected manufacturing industries<sup>1</sup>

<sup>1</sup> This table is included in the January, April, July, and October issues of the Review.

NOTE: The following applies, with a few exceptions, to the statistical series published in the Current Labor Statistics section: (1) The source is the U.S. Department of Labor, Bureau of Labor Statistics; (2) a description of each series may be found in Techniques of Preparing Major BLS Statistical Series, BLS Bull. 1106 (1954); and (3) the scope of coverage is the United States without Alaska and Hawaii. Exceptions are noted on the tables.

## A.—Employment

TABLE A-1. Estimated total labor force classified by employment status, hours worked, and sex  
(In thousands)

Employment status	Estimated number of persons 14 years of age and over <sup>1</sup>														Annual average	
	1960							1959								
	June	May	Apr.	Mar.	Feb.	Jan. <sup>2</sup>	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1958	1957 <sup>3</sup>	
Total, both sexes																
Total labor force.....	75,499	73,171	72,331	70,993	70,070	70,689	71,808	71,839	72,629	73,109	73,204	73,875	73,862	71,284	70,746	
Civilian labor force.....	73,002	70,667	69,819	68,473	68,440	68,166	69,276	69,310	70,103	69,577	71,326	71,324	71,224	68,647	67,946	
Unemployment.....	4,423	3,459	3,668	4,206	4,149	3,577	4,149	3,670	3,272	3,230	3,426	3,744	3,983	4,081	3,986	
Unemployment rate, seasonally adjusted <sup>4</sup> .....	5.5	4.9	5.0	5.4	4.8	5.2	5.2	5.6	6.0	5.6	5.5	5.1	4.9	5.8	4.3	
Unemployed 4 weeks or less.....	2,654	1,638	1,580	1,516	1,476	1,909	1,683	1,846	1,607	1,539	1,567	1,773	2,274	1,933	1,485	
Unemployed 5-10 weeks.....	695	644	667	855	1,095	930	833	764	681	662	795	902	530	959	680	
Unemployed 11-14 weeks.....	259	256	309	619	396	409	250	276	288	295	250	251	250	438	340	
Unemployed 15-26 weeks.....	420	599	705	715	833	441	381	356	333	340	250	305	387	785	321	
Unemployed over 26 weeks.....	396	411	499	522	431	459	430	428	363	396	463	515	540	667	289	
Employment.....	68,579	67,208	66,159	64,267	64,520	64,020	65,099	65,040	66,831	66,347	67,241	67,594	67,343	63,996	63,011	
Nonagricultural.....	61,722	61,371	60,765	59,702	59,901	59,409	60,888	60,040	60,707	60,105	60,884	60,760	60,111	58,122	56,789	
Worked 35 hours or more.....	47,879	48,594	44,829	46,151	45,357	47,115	48,455	48,877	48,800	48,707	44,903	47,627	44,873	44,236	46,236	
Worked 15-34 hours.....	7,281	7,203	10,455	7,585	8,005	6,867	7,227	10,991	9,049	21,859	6,005	6,333	6,257	7,324	6,933	
Worked 1-14 hours.....	2,921	3,578	3,245	3,575	3,553	3,356	3,496	3,254	3,369	2,929	2,409	2,683	2,945	3,047	2,777	
With a job but not at work <sup>5</sup> .....	3,691	1,997	2,138	2,391	2,386	2,070	1,707	1,920	2,490	4,000	6,009	6,800	3,253	2,876	2,831	
Agricultural.....	6,856	5,837	5,393	4,565	4,619	4,611	4,811	5,001	6,124	6,242	6,357	6,525	7,231	5,844	6,223	
Worked 35 hours or more.....	4,874	4,129	3,788	2,465	2,597	2,622	2,978	3,774	3,972	4,253	4,543	4,730	4,923	3,857	4,197	
Worked 15-34 hours.....	1,462	1,254	1,189	1,117	1,121	1,178	1,175	1,307	1,531	1,353	1,280	1,471	1,700	1,351	1,413	
Worked 1-14 hours.....	408	305	312	586	557	536	474	373	468	441	202	195	182	199	196	
With a job but not at work <sup>5</sup> .....	82	89	105	400	344	273	186	144	154	125	202	195	182	199	196	
Males																
Total labor force.....	50,949	49,337	49,060	48,445	48,487	48,412	48,778	48,729	49,045	49,110	50,230	50,684	50,385	48,902	48,649	
Civilian labor force.....	48,484	46,865	46,580	45,958	45,999	45,923	46,278	46,232	46,551	46,610	47,725	48,179	47,879	46,197	45,882	
Unemployment.....	2,696	2,184	2,431	2,910	2,672	2,821	2,405	2,370	2,007	2,022	2,138	2,316	2,403	3,185	1,862	
Employment.....	45,788	44,681	44,149	43,048	43,326	43,103	43,873	43,863	44,544	44,588	45,587	45,863	45,476	43,012	44,026	
Nonagricultural.....	40,462	39,932	39,574	38,038	38,219	38,108	39,744	39,337	39,782	39,764	40,537	40,468	39,943	38,240	38,939	
Worked 35 hours or more.....	33,718	33,908	31,761	32,273	31,951	32,073	33,645	33,730	31,957	32,179	32,933	31,960	34,033	31,360	32,466	
Worked 15-34 hours.....	3,551	3,384	3,170	3,554	3,361	3,341	3,445	3,984	4,594	13,046	2,933	3,221	2,912	3,736	2,461	
Worked 1-14 hours.....	1,193	1,502	1,433	1,559	1,547	1,440	1,468	1,363	1,437	1,244	1,043	1,236	1,292	1,329	1,197	
With a job but not at work <sup>5</sup> .....	1,699	1,237	1,210	1,653	1,637	1,354	1,180	1,291	1,743	2,296	3,905	4,071	1,735	1,784	1,748	
Agricultural.....	5,325	4,749	4,575	4,010	4,009	3,995	4,128	4,626	4,782	4,824	5,050	5,300	5,335	4,802	5,037	
Worked 35 hours or more.....	4,232	3,705	3,503	2,257	2,397	2,409	2,729	3,306	3,481	3,681	3,932	4,093	4,255	3,413	3,716	
Worked 15-34 hours.....	724	695	749	859	818	870	845	806	861	780	647	792	860	557	842	
Worked 1-14 hours.....	296	273	228	514	482	462	380	251	298	281	291	312	286	333	308	
With a job but not at work <sup>5</sup> .....	73	75	95	380	315	253	177	137	142	111	152	174	124	179	171	
Females																
Total labor force.....	24,550	23,835	23,271	22,545	22,482	22,277	23,030	23,110	23,584	22,990	22,974	23,191	23,477	22,482	22,097	
Civilian labor force.....	24,518	23,803	23,239	22,516	22,450	22,245	22,998	23,078	23,552	22,967	22,942	23,159	23,445	22,451	22,064	
Unemployment.....	1,727	1,276	1,229	1,296	1,238	1,172	1,301	1,265	1,209	1,288	1,288	1,429	1,579	1,626	1,043	
Employment.....	22,791	22,527	22,010	21,219	21,192	20,917	21,696	21,777	22,287	21,759	21,654	21,731	21,866	20,824	21,021	
Nonagricultural.....	21,260	21,439	21,191	20,664	20,582	20,301	21,144	20,703	20,945	20,341	20,347	20,276	20,170	19,882	19,837	
Worked 35 hours or more.....	14,160	14,786	13,066	13,878	13,505	14,144	14,809	13,145	13,810	8,889	13,145	12,997	13,023	13,453	13,623	
Worked 15-34 hours.....	3,680	3,819	5,285	4,032	4,244	3,825	3,781	5,038	4,454	8,152	3,133	3,114	3,347	3,589	3,491	
Worked 1-14 hours.....	1,728	2,075	1,912	2,016	2,006	1,916	2,028	1,891	1,933	1,684	1,366	1,447	1,654	1,718	1,580	
With a job but not at work <sup>5</sup> .....	1,691	759	928	738	829	716	527	628	747	1,154	2,704	2,819	1,548	1,063	1,078	
Agricultural.....	1,331	1,088	819	855	810	815	853	1,074	1,343	1,418	1,307	1,455	1,696	1,042	1,184	
Worked 35 hours or more.....	643	434	283	209	198	213	249	497	491	600	608	640	668	414	483	
Worked 15-34 hours.....	768	558	439	257	305	308	330	507	670	641	581	680	842	504	871	
Worked 1-14 hours.....	112	93	84	71	75	74	94	92	170	161	95	116	160	104	107	
With a job but not at work <sup>5</sup> .....	9	14	11	20	29	20	9	8	11	14	21	21	29	20	25	

<sup>1</sup> Estimates are based on information obtained from a sample of households and are subject to sampling variability. Data relate to the calendar week ending nearest the 15th day of the month. The employed total includes all wage and salary workers, self-employed persons, and unpaid workers in family-operated enterprises. Persons in institutions are not included.

Because of rounding, sums of individual items do not necessarily equal totals.

<sup>2</sup> Data for 1960 include Alaska and Hawaii and are therefore not directly comparable with earlier data. The levels of the civilian labor force, the employed, and nonagricultural employment were each increased by more than 200,000. The estimates for agricultural employment and unemployment were affected so slightly that these series can be regarded as entirely comparable with pre-1960 data.

<sup>3</sup> Beginning with January 1957, 2 groups numbering between 200,000 and 800,000 which were formerly classified as employed (under "with a job but not at work") were assigned to different classifications, mostly to the unemployed.

played. For a full explanation, see Monthly Report on the Labor Force, February 1957 (Current Population Reports, Labor Force, Series P-87, No. 176).

<sup>4</sup> Unemployment as a percent of labor force.

<sup>5</sup> Includes persons who had a job or business but who did not work during the survey week because of illness, bad weather, vacation, or labor dispute. Prior to January 1957, also included were persons on layoff and persons who had new jobs to which they were scheduled to report within 30 days. Most of the persons in these groups have, since that time, been classified as unemployed.

NOTE: For a description of these series, see Explanatory Notes (in Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, current issues).



TABLE A-2. Employees in nonagricultural establishments, by industry<sup>1</sup>

Industry	[In thousands]														
	1960						1959						Annual average		
	June <sup>1</sup>	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
Total employees.....	53,209	52,951	52,844	52,172	52,060	52,078	53,756	52,793	52,569	52,648	52,066	52,343	52,580	51,975	50,543
Mining.....	691	679	677	666	669	658	668	660	621	620	639	710	718	676	721
Metal.....	97.4	96.5	95.1	93.2	88.6	72.7	69.5	67.2	46.5	46.7	62.0	97.4	97.7	80.1	93.1
Iron.....	35.8	34.2	33.4	32.9	32.6	32.3	30.0	9.7	9.7	10.6	35.2	35.4	27.2	30.8	27.2
Copper.....	31.6	31.3	30.2	26.4	11.1	8.1	8.0	8.7	8.9	20.1	31.0	31.1	22.3	28.6	28.6
Lead and zinc.....	11.7	12.3	12.3	12.3	12.3	12.2	12.1	11.4	11.5	12.9	12.7	12.6	12.3	12.9	12.9
Anthracite.....	12.1	12.1	12.1	14.1	15.5	15.5	15.7	15.9	16.0	15.6	15.4	17.1	15.3	16.3	20.3
Bituminous coal.....	168.4	167.4	168.7	171.5	173.2	173.2	173.7	164.3	145.4	136.3	135.8	171.3	177.9	168.1	195.2
Crude-petroleum and natural-gas production.....	287.3	287.3	284.6	287.7	291.4	297.0	297.9	298.6	306.0	309.7	310.7	308.7	300.8	302.6	302.6
Petroleum and natural-gas production (except contract services).....	174.7	174.8	174.3	175.9	177.7	177.7	177.9	177.7	178.4	181.8	183.7	184.0	182.8	180.6	188.0
Nonmetallic mining and quarrying.....	118.5	115.9	112.6	102.9	104.1	105.1	111.6	114.2	114.2	115.2	115.7	113.8	113.2	110.7	109.3
Contract construction.....	2,977	2,838	2,590	2,312	2,339	2,453	2,699	2,656	2,961	3,043	3,107	3,045	2,968	2,767	2,648
Nonbuilding construction.....	600	592	416	429	437	518	587	634	660	688	687	685	685	584	569
Highway and street construction.....	285.6	222.0	161.5	167.5	170.0	220.5	270.8	300.5	329.8	347.2	343.0	335.0	271.2	256.0	256.0
Other nonbuilding construction.....	314.4	279.7	254.8	261.4	267.3	297.0	316.6	324.0	330.0	340.4	344.1	350.0	312.7	313.2	313.2
Building construction.....	2,238	2,088	1,896	1,960	2,016	2,181	2,269	2,327	2,383	2,419	2,348	2,301	2,183	2,079	2,079
General contractors.....	774.3	705.4	609.8	638.7	660.5	725.5	764.8	801.6	827.7	840.5	836.7	824.0	787.9	760.6	760.6
Special-trade contractors.....	1,463.6	1,382.7	1,286.6	1,321.7	1,355.1	1,455.2	1,504.6	1,525.4	1,556.2	1,569.8	1,511.3	1,477.3	1,424.7	1,328.6	1,328.6
Plumbing and heating.....	305.8	292.1	281.2	287.5	296.6	308.6	314.5	322.6	329.1	330.8	325.5	314.0	310.5	303.5	303.5
Painting and decorating.....	221.2	196.3	179.9	178.2	183.5	204.9	222.0	228.4	239.9	246.9	239.9	217.7	201.4	190.6	190.6
Electrical work.....	176.3	170.0	165.3	169.3	171.0	176.3	180.1	181.1	185.1	184.2	179.1	178.5	174.2	173.2	173.2
Other special-trade contractors.....	760.3	724.3	660.2	686.7	704.0	765.4	788.0	792.8	801.1	807.9	788.8	769.0	738.6	682.2	682.2
Manufacturing.....	16,378	16,352	16,389	16,478	16,520	16,470	16,484	16,280	16,197	16,367	16,169	16,418	16,435	16,168	15,468
Durable goods.....	9,475	9,517	9,548	9,630	9,680	9,640	9,577	9,313	9,168	9,225	9,098	9,523	9,581	9,290	8,743
Nondurable goods.....	6,903	6,835	6,832	6,848	6,840	6,830	6,907	6,967	7,029	7,142	7,111	6,887	6,874	6,878	6,725
Durable goods.....	145.9	149.4	150.0	150.7	150.0	149.4	149.5	147.0	145.3	145.2	142.3	142.4	139.7	141.7	126.7
Lumber and wood products (except furniture).....	679.9	659.1	636.0	624.2	628.1	629.4	651.6	667.2	679.9	687.9	698.0	694.4	691.8	658.0	621.7
Logging camps and contractors.....	106.3	92.3	90.3	91.9	93.2	102.2	106.1	107.7	108.4	114.6	115.3	112.1	98.7	86.3	86.3
Sawmills and planing mills.....	318.8	310.7	304.9	305.9	306.3	315.5	323.6	329.0	332.9	333.2	330.4	330.9	319.9	311.0	311.0
Structural wood products.....	132.4	132.0	130.2	131.6	131.5	134.9	138.4	142.6	145.5	147.4	147.0	145.9	139.1	127.1	127.1
Wooden containers.....	44.8	43.6	42.2	42.2	42.3	43.0	42.5	43.5	43.7	43.2	44.8	45.6	44.0	44.7	44.7
Miscellaneous wood products.....	56.8	57.4	56.7	56.5	56.1	56.0	56.6	57.1	57.4	57.6	56.9	57.3	56.3	52.7	52.7
Furniture and fixtures.....	392.2	388.6	391.3	390.8	390.8	391.1	391.2	390.6	391.9	392.0	388.3	382.2	384.1	384.0	387.9
Household furniture.....	279.2	282.3	282.2	282.9	283.4	285.1	285.3	286.9	284.6	286.1	278.6	277.0	279.3	283.1	283.1
Office, public-building and professional furniture.....	48.3	48.5	48.1	47.4	47.1	46.9	47.0	47.7	48.1	48.9	48.8	48.2	46.1	43.8	43.8
Partitions, shelving, lockers, and fixtures.....	36.3	35.9	35.5	35.7	36.1	35.8	35.6	35.7	35.8	35.4	35.5	35.6	34.4	34.5	34.5
Screens, blinds, and miscellaneous furniture and fixtures.....	24.8	24.6	25.0	24.8	24.5	23.4	22.7	24.6	25.5	24.8	24.3	25.3	24.2	22.5	22.5
Stone, clay, and glass products.....	560.1	558.1	554.1	547.8	551.0	548.0	557.3	561.6	561.6	572.8	571.5	568.7	566.1	550.4	514.5
Flat glass.....	30.8	31.7	34.4	36.3	36.3	36.4	36.3	36.7	34.7	34.1	32.7	33.1	32.7	33.1	32.7
Glass and glassware, pressed or blown.....	107.1	105.5	105.0	104.0	101.1	102.1	103.5	99.2	104.5	102.9	100.9	103.1	100.2	95.5	95.5
Glass products made of purchased glass.....	16.8	16.8	17.2	17.6	17.5	17.8	18.4	18.6	18.6	18.1	17.9	17.8	18.0	16.3	16.3
Cement, hydraulic.....	42.2	41.2	39.0	38.4	39.8	41.4	41.8	41.1	43.2	43.6	43.5	43.2	41.7	42.0	42.0
Structural clay products.....	75.9	74.5	72.3	72.7	73.3	76.0	77.4	77.6	77.6	78.7	78.4	78.3	75.8	73.1	73.1
Pottery and related products.....	48.7	49.2	49.5	49.4	48.9	48.8	49.8	50.1	50.2	49.7	49.4	49.4	48.1	43.9	43.9
Concrete, gypsum, and plaster products.....	118.5	116.4	111.5	112.8	112.6	116.6	118.3	121.8	125.4	126.2	123.5	122.5	117.8	108.8	108.8
Cut-stone and stone products.....	18.1	18.0	17.5	17.5	17.3	17.7	18.0	18.2	18.4	18.5	18.4	18.2	18.1	18.3	18.3
Miscellaneous nonmetallic mineral products.....	100.0	100.8	101.4	102.3	101.0	100.5	98.1	96.3	101.0	99.7	101.0	100.8	98.3	89.3	89.3
Primary metal industries.....	1,200.3	1,225.3	1,250.5	1,273.3	1,280.7	1,275.1	1,264.2	1,190.2	823.9	834.1	866.2	1,206.1	1,291.4	1,137.7	1,104.4
Blast furnaces, steel works, and rolling mills.....	606.4	620.5	635.9	640.1	638.8	634.1	597.3	222.8	229.0	342.2	630.8	651.8	522.0	536.7	536.7
Iron and steel foundries.....	223.1	227.5	228.4	232.2	230.3	230.3	218.8	226.9	228.3	229.7	230.1	231.4	223.9	197.4	197.4
Primary smelting and refining of nonferrous metals.....	58.5	59.4	57.3	54.7	53.2	49.7	44.3	44.9	45.2	55.7	56.9	56.3	52.2	56.3	56.3
Secondary smelting and refining of nonferrous metals.....	12.0	12.4	12.6	12.6	12.7	12.4	12.0	11.9	12.0	12.8	12.5	12.5	12.2	11.5	11.5
Rolling, drawing, and alloying of nonferrous metals.....	112.1	113.6	115.3	115.4	116.0	116.6	116.2	117.0	117.6	117.1	119.4	119.6	115.8	105.8	105.8
Nonferrous foundries.....	60.9	62.8	65.4	67.0	67.3	67.0	66.1	67.6	66.1	64.6	64.1	64.8	64.8	57.7	57.7
Miscellaneous primary metal industries.....	152.3	154.3	157.9	158.7	158.7	156.8	154.1	144.5	132.8	135.9	137.1	152.3	155.0	146.8	139.4

See footnotes at end of table.

TABLE A-2. Employees in nonagricultural establishments, by industry<sup>1</sup>—Continued

Industry	1960						1959						Annual average		
	June <sup>2</sup>	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
Manufacturing—Continued															
Durable goods—Continued															
Fabricated metal products (except ordnance, machinery, and transportation equipment)	1,083.8	1,079.7	1,079.8	1,067.3	1,106.2	1,099.2	1,082.0	1,042.1	1,051.6	1,082.6	1,055.9	1,084.1	1,102.0	1,069.0	1,029.9
Tin cans and other tinware	61.3	59.5	59.1	58.2	58.5	56.8	55.9	56.7	65.4	64.7	62.8	63.1	59.6	58.2	58.2
Cutlery, handtools, and hardware	133.0	134.0	137.5	139.7	139.8	138.1	123.7	130.1	138.5	134.7	132.4	130.4	134.2	128.3	128.3
Heating apparatus (except electric) and plumbers' supplies	115.9	116.1	116.4	117.4	116.9	114.2	116.5	120.6	121.7	120.6	118.6	118.7	116.6	109.3	109.3
Fabricated structural metal products	287.5	282.0	282.5	282.3	281.8	282.1	275.5	273.7	278.9	303.1	301.6	285.3	303.0	285.3	303.0
Metal stamping, coating, and engraving	236.5	237.2	246.0	251.2	245.1	239.3	223.3	237.2	239.2	219.8	228.0	233.5	230.1	210.7	210.7
Lighting fixtures	47.9	49.8	50.9	51.1	50.8	49.0	49.8	51.3	51.3	49.1	47.6	48.8	49.2	44.7	44.7
Fabricated wire products	57.4	58.1	59.6	60.5	60.0	59.2	57.2	54.4	54.8	52.8	56.0	57.7	56.5	52.4	52.4
Miscellaneous fabricated metal products	140.2	143.1	145.3	145.8	145.3	142.4	140.2	138.0	138.0	135.4	137.6	142.2	137.5	123.3	123.3
Machinery (except electrical)	1,658.1	1,664.9	1,677.8	1,687.7	1,691.1	1,675.0	1,660.3	1,625.8	1,636.8	1,655.3	1,624.6	1,633.9	1,644.9	1,611.7	1,601.2
Engines and turbines	103.6	104.3	107.1	107.4	108.5	107.3	104.6	105.7	108.4	103.6	104.1	105.1	103.1	93.1	93.1
Agricultural machinery and tractors	149.6	153.4	159.1	160.5	157.8	154.1	141.0	151.4	167.5	158.9	171.5	173.0	157.9	136.9	136.9
Construction and mining machinery	130.9	132.5	133.0	132.6	131.2	129.2	125.2	126.3	132.6	132.1	135.5	136.2	129.0	122.0	122.0
Metalworking machinery	263.6	264.7	263.1	259.9	257.3	255.4	251.6	247.9	246.5	239.9	239.3	239.4	233.7	223.7	223.7
Special-industry machinery (except metalworking machinery)	176.6	176.1	175.4	174.6	173.3	172.3	171.8	169.8	170.3	166.8	165.9	166.2	165.5	150.6	150.6
General industrial machinery	230.2	231.0	232.7	233.0	229.4	229.3	228.9	229.5	229.4	230.3	229.2	225.5	223.5	220.1	220.1
Office and store machines and devices	138.7	139.0	138.3	137.6	137.0	136.1	136.9	136.0	134.5	132.4	129.8	132.6	132.7	124.9	124.9
Service-industry and household machines	196.5	197.7	195.3	198.5	194.4	189.6	184.4	186.3	185.7	185.7	186.3	187.2	184.9	168.9	168.9
Miscellaneous machinery parts	275.2	279.1	283.7	287.0	285.5	285.0	281.4	283.6	282.4	274.9	273.4	276.7	275.8	252.0	252.0
Electrical machinery	1,287.3	1,289.4	1,293.7	1,310.0	1,318.4	1,318.6	1,317.0	1,301.5	1,311.2	1,301.8	1,300.6	1,341.6	1,322.6	1,241.6	1,118.8
Electrical generating, transmission, distribution, and industrial apparatus	414.9	417.9	421.4	422.5	420.5	419.5	407.4	413.1	416.9	411.4	407.0	405.6	402.1	373.5	373.5
Electrical appliances	38.7	39.3	40.3	40.0	39.6	39.5	39.5	40.3	39.7	37.9	36.9	37.0	37.7	34.6	34.6
Insulated wire and cable	28.6	28.3	28.9	29.1	29.5	29.3	28.8	28.7	28.0	27.7	26.9	27.9	28.1	25.4	25.4
Electrical equipment for vehicles	71.2	72.6	75.4	77.0	76.4	74.4	70.7	73.5	72.2	61.3	68.6	69.8	69.8	61.8	61.8
Electric lamps	29.5	29.8	29.7	29.6	29.5	29.5	29.5	29.3	29.3	28.6	27.7	27.5	27.4	27.6	27.6
Communication equipment	657.4	657.5	666.1	671.3	674.2	674.7	674.9	675.2	664.4	645.3	623.8	615.8	627.2	551.4	551.4
Miscellaneous electrical products	49.1	48.3	48.2	48.7	48.8	48.1	50.7	51.1	51.7	49.3	48.9	49.1	49.1	48.7	48.7
Transportation equipment	1,610.1	1,653.4	1,655.1	1,700.9	1,721.4	1,722.3	1,655.9	1,511.1	1,662.4	1,688.4	1,619.8	1,692.8	1,708.7	1,670.8	1,592.8
Motor vehicles and equipment	783.6	790.8	819.0	837.7	822.6	796.9	602.2	784.2	758.7	679.1	744.8	754.2	731.6	630.8	630.8
Aircraft and parts	659.9	658.7	690.3	687.0	693.7	700.9	709.7	717.4	730.5	732.4	735.6	734.9	737.6	737.6	737.6
Aircraft	381.4	387.0	393.0	397.2	400.6	404.2	412.3	418.4	429.2	433.0	433.4	434.0	435.0	435.0	435.0
Aircraft engines and parts	139.0	139.8	140.7	140.6	142.0	144.2	144.9	145.2	145.8	144.0	146.8	146.6	146.3	146.6	146.6
Aircraft propellers and parts	14.1	13.9	14.0	13.8	13.8	13.6	13.6	13.9	14.1	14.0	14.3	14.4	14.4	14.4	14.4
Other aircraft parts and equipment	125.4	128.0	132.6	135.4	137.3	138.9	138.9	139.9	141.4	141.4	141.1	140.3	139.2	129.5	129.5
Ship and boat building and repairing	137.9	135.6	132.4	131.0	145.6	140.7	141.9	131.1	131.3	140.7	144.6	148.0	142.8	144.8	144.8
Shipbuilding and repairing	112.8	110.1	107.4	106.4	121.7	117.5	119.5	109.7	111.1	121.2	123.3	124.2	120.9	125.3	125.3
Boatbuilding and repairing	25.1	25.5	25.0	24.6	23.9	23.2	22.4	21.4	20.2	19.8	21.3	22.8	21.9	19.2	19.2
Railroad equipment	61.5	59.6	58.7	56.0	51.4	47.7	46.9	48.8	48.9	46.9	47.7	48.8	48.8	48.8	48.8
Other transportation equipment	10.5	10.4	10.5	9.7	9.0	9.7	10.4	10.9	11.0	10.7	10.6	10.4	10.1	9.9	9.9
Instruments and related products	352.7	351.4	353.1	353.7	353.6	352.1	354.0	352.5	351.8	349.8	348.4	339.2	339.2	338.9	318.2
Laboratory, scientific, and engineering instruments	66.0	66.3	66.6	66.8	66.9	68.2	67.8	67.2	66.4	65.7	65.3	63.9	64.2	58.1	58.1
Mechanical measuring and controlling instruments	100.4	100.3	100.2	99.9	97.9	97.3	96.4	97.4	96.7	94.9	94.3	94.6	93.0	83.9	83.9
Optical instruments and lenses	18.4	18.4	18.2	17.6	17.3	16.9	17.1	16.9	16.4	15.8	15.3	15.0	15.8	14.0	14.0
Surgical, medical, and dental instruments	45.1	45.3	45.1	44.9	44.6	44.7	44.1	43.7	43.6	42.8	42.0	43.5	43.1	41.5	41.5
Ophthalmic goods	27.6	27.6	27.7	27.8	28.1	28.1	28.0	27.6	27.5	26.4	25.6	25.7	26.1	23.7	23.7
Photographic apparatus	65.5	65.6	65.6	65.8	66.4	67.1	66.8	65.9	66.1	66.0	65.7	65.0	65.3	65.6	65.6
Watches and clocks	28.4	29.6	30.3	30.8	30.9	31.7	32.3	32.1	33.1	31.8	31.0	31.5	31.4	28.4	28.4
Miscellaneous manufacturing industries	504.5	498.1	496.5	493.9	489.0	480.0	494.1	516.9	522.3	517.7	501.2	480.7	485.2	486.5	459.9
Jewelry, silverware, and plated ware	45.7	46.0	46.7	46.3	46.4	47.7	48.0	48.5	48.0	46.5	44.3	45.2	45.9	44.4	44.4
Musical instruments and parts	18.5	19.1	19.5	19.6	19.7	19.9	19.8	19.8	19.9	19.1	18.4	15.5	17.7	18.0	18.0
Toys and sporting goods	93.5	88.1	81.8	77.2	73.3	79.4	95.2	100.3	90.2	90.4	86.1	87.5	84.5	81.7	81.7
Pens, pencils, other office supplies	31.5	31.5	31.3	31.2	30.4	31.0	32.1	32.3	32.1	31.6	31.1	30.8	30.8	30.7	30.7
Costume jewelry, buttons, notions	57.8	59.1	61.5	61.9	60.6	61.8	62.2	63.3	63.0	62.5	59.4	59.6	60.6	58.2	58.2
Fabricated plastics products	94.7	95.4	95.5	96.6	96.0	96.2	97.1	97.1	96.3	93.6	91.8	92.1	92.6	84.0	84.0
Other manufacturing industries	156.4	157.3	157.6	156.2	153.6	158.6	162.5	161.5	161.2	165.5	162.8	154.4	154.1	144.8	144.8
Nondurable goods															
Food and kindred products	1,469.5	1,414.6	1,404.1	1,376.9	1,380.2	1,396.6	1,434.5	1,478.2	1,426.9	1,414.5	1,420.9	1,416.0	1,479.2	1,470.2	1,476.4
Meat products	298.7	292.2	294.8	298.2	302.0	305.7	305.0	294.6	291.1	311.0	306.3	303.8	302.1	307.6	307.6
Dairy products	97.6	94.6	91.0	90.2	89.8	90.5	91.6	96.2	100.9	103.3	104.3	104.3	96.8	96.8	96.8
Canning and preserving	184.1	185.9	167.3	166.7	169.5	182.9	211.7	200.1	182.0	350.3	253.7	214.2	223.0	220.4	220.4
Grain-mill products	108.7	108.8	108.4	109.3	109.4	109.9	109.8	118.0	115.4	115.2	114.9	115.6	113.3	113.8	113.8
Bakery products	285.7	287.0	286.1	286.8	286.9	287.9	290.0	286.1	280.2	280.0	280.8	284.6	285.2	284.3	284.3
Sugar	25.1	26.1	24.5	23.7	34.8	41.3	45.4	43.1	29.2	27.7	26.2	25.9	31.0	31.4	31.4
Confectionery and related products	69.6	70.2	71.8	72.3	72.7	78.0	78.5	79.1	77.7	73.6	68.3	71.0	73.5	75.4	75.4
Beverages	211.1	206.3	201.6	198.1	200.4	205.5	210.5	215.2	220.5	220.3	217.9	216.4	209.1	207.0	207.0
Miscellaneous food products	134.0	132.6	131.4	132.9	132.1	132.8	135.4	137.5	138.8	139.5	137.6	141.3	136.2	137.3	137.3

See footnotes at end of table.

TABLE A-2. Employees in nonagricultural establishments, by industry<sup>1</sup>—Continued

Industry	1909												1939												Annual average	
	[in thousands]																									
	June <sup>1</sup>	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1939	1938											
Manufacturing—Continued																										
Nondurable goods—Continued																										
Tobacco manufactures.....	77.9	78.8	79.1	81.4	86.6	88.5	91.2	92.5	103.1	108.8	99.9	77.3	79.9	80.2	90.4											
Cigarettes.....	37.7	37.9	37.3	37.5	37.6	37.7	37.7	38.0	37.7	37.7	37.9	35.7	37.5	37.4	36.4											
Cigars.....	25.5	25.6	25.9	26.5	26.5	25.4	27.1	27.4	37.4	37.1	38.8	28.7	27.0	27.1	29.1											
Tobacco and snuff.....	6.2	6.2	6.3	6.4	6.4	6.4	6.4	6.4	6.4	6.7	6.8	6.9	6.6	6.5	6.5											
Tobacco stemming and redrying.....	9.4	9.4	11.9	16.2	19.1	20.0	20.7	31.6	37.3	28.4	9.1	8.5	18.1	15.4												
Textile-mill products.....	958.2	956.6	955.1	956.6	952.0	953.0	960.3	960.3	978.5	983.1	980.1	964.7	973.1	966.0	941.3											
Securing and combing plants.....	5.4	5.3	5.2	5.6	5.6	5.4	5.4	5.3	5.6	5.7	5.8	5.8	5.7	5.5	5.2											
Yarn and thread mills.....	105.8	105.9	106.3	106.6	107.4	108.2	108.7	110.3	111.7	111.7	111.7	111.2	112.0	110.0	106.2											
Broad-woven fabric mills.....	392.9	395.3	396.6	394.9	396.1	398.1	398.9	399.9	400.4	399.8	399.8	399.7	400.2	398.5	396.9											
Narrow fabric and small wares.....	29.3	29.4	29.8	29.7	29.8	29.4	29.4	29.8	29.8	29.9	29.8	29.8	30.2	29.5	27.8											
Knitting mills.....	221.7	217.5	215.7	211.3	210.4	216.2	224.5	228.4	230.2	230.6	231.3	234.9	220.1	207.0												
Dyeing and finishing textiles.....	89.9	89.9	88.9	89.4	89.6	89.3	89.3	89.4	89.5	89.5	89.0	88.4	88.4	88.4	84.9											
Carpets, rugs, other floor coverings.....	44.8	45.8	46.2	46.7	46.5	46.2	46.2	46.7	46.5	46.5	45.6	45.6	45.7	46.4	44.8											
Hats (except cloth and millinery).....	10.1	9.6	10.2	9.9	10.3	10.4	10.2	9.6	10.2	10.3	9.8	10.2	10.1	10.1	10.1											
Miscellaneous textile goods.....	56.7	56.4	57.7	57.9	57.3	57.1	56.9	58.1	59.0	57.5	57.1	57.7	57.3	57.3	53.9											
Apparel and other finished textile products.....	1,207.0	1,208.9	1,211.2	1,247.8	1,240.7	1,219.5	1,222.9	1,239.9	1,232.3	1,239.1	1,234.7	1,178.6	1,200.2	1,210.7	1,156.3											
Men's and boys' suits and coats.....	115.1	114.3	114.9	114.6	114.6	114.3	114.4	114.4	113.5	114.0	113.5	104.6	113.3	111.4	107.3											
Men's and boys' furnishings and work clothing.....	354.3	349.6	351.7	349.6	346.7	349.1	352.7	351.2	351.4	348.7	346.0	340.5	340.5	338.3	311.3											
Women's outerwear.....	328.6	335.7	338.0	335.1	346.2	349.8	348.0	336.0	343.6	348.8	330.5	338.7	338.7	344.7	330.7											
Women's, children's undergarments.....	118.3	120.0	121.6	121.6	119.8	121.5	124.0	124.0	122.6	124.0	112.7	116.8	118.9	114.1												
Millinery.....	15.3	17.8	22.8	22.2	19.1	18.3	17.0	18.6	18.7	19.6	18.6	13.7	18.5	17.9												
Children's outerwear.....	72.8	69.6	73.8	74.0	73.5	72.3	72.6	72.4	73.4	76.4	74.5	76.8	74.5	74.5	73.6											
Fur goods.....	6.9	6.6	6.6	6.8	6.8	6.6	6.6	6.3	6.3	6.3	6.4	6.4	6.4	6.4	10.7											
Miscellaneous apparel and accessories.....	59.5	60.2	60.0	59.2	57.7	60.9	62.7	64.2	64.2	62.9	57.7	60.7	60.3	56.7												
Other fabricated textile products.....	138.1	137.4	138.4	137.6	135.7	135.7	138.1	139.2	142.6	140.7	135.8	131.0	131.8	135.0	128.0											
Paper and allied products.....	567.7	562.6	562.3	560.0	569.9	561.3	564.1	564.4	566.2	571.8	568.2	561.3	565.0	559.9	547.1											
Pulp, paper, and paperboard mills.....	274.2	274.0	273.1	274.0	275.4	274.0	273.3	273.9	278.2	277.7	277.9	276.9	277.9	273.8	266.4											
Paperboard containers and boxes.....	151.8	152.2	152.3	152.4	152.6	152.7	157.7	158.0	154.6	154.6	151.7	153.8	153.5	148.6												
Other paper and allied products.....	136.6	136.1	134.6	133.3	133.3	133.9	133.4	134.3	135.6	133.9	132.7	133.3	132.6	128.1												
Printing, publishing, and allied industries.....	892.2	886.4	886.2	883.3	878.8	887.5	886.2	888.0	882.0	871.0	864.8	862.8	868.3	862.2	842.2											
Newspapers.....	329.5	327.7	327.2	325.7	324.9	329.6	329.6	327.6	326.3	324.7	323.6	322.0	322.6	316.4												
Periodicals.....	62.7	63.9	63.9	64.2	64.7	64.8	64.7	65.0	63.7	61.7	60.9	60.6	62.6	61.5												
Books.....	62.3	62.3	61.6	61.1	60.2	60.1	59.7	59.6	59.5	58.9	57.1	57.1	58.0	58.0												
Commercial printing.....	227.4	229.3	230.3	229.1	229.2	230.0	228.8	228.0	227.3	223.2	222.9	222.6	224.0	220.7												
Lithography.....	68.4	68.6	68.1	67.3	65.5	65.9	67.9	67.5	67.3	66.2	65.6	65.6	66.3	65.7												
Greeting cards.....	20.7	20.5	20.1	19.9	19.6	21.6	23.0	22.3	22.1	21.3	20.9	20.8	20.8	20.0												
Bookbinding and related industries.....	48.0	48.0	47.8	47.8	46.8	46.8	46.9	47.6	47.7	47.2	45.8	46.0	46.2	44.8												
Miscellaneous publishing and printing services.....	67.4	66.0	67.2	68.5	67.9	68.0	68.6	68.4	68.1	67.8	68.0	67.7	68.0	68.4												
Chemicals and allied products.....	872.9	879.0	882.3	869.4	864.6	860.5	861.9	862.1	861.1	860.8	854.2	847.8	843.2	847.8	820.9											
Industrial inorganic chemicals.....	104.7	104.6	103.9	103.7	103.6	103.9	103.9	104.0	103.6	104.2	104.1	103.6	102.2	102.5	102.2											
Industrial organic chemicals.....	339.8	338.3	336.7	334.9	334.0	332.9	332.9	331.7	330.8	332.1	332.8	330.2	326.7	328.6	316.6											
Drugs and medicines.....	105.5	105.5	105.8	105.2	105.6	105.3	105.3	104.9	104.4	104.9	104.9	104.8	103.2	104.0	102.9											
Soup, cleaning and polishing preparations.....	53.0	52.7	52.7	52.4	51.8	51.7	51.4	51.5	51.0	51.0	51.0	51.0	50.9	50.9	49.3											
Paints, pigments, and fillers.....	77.8	77.3	76.8	76.9	76.3	76.4	76.4	77.1	78.7	78.6	78.2	78.0	78.0	78.5	73.0											
Gum and wood chemicals.....	7.8	7.8	7.7	7.9	7.8	7.8	7.7	7.6	7.8	7.7	7.8	7.7	7.8	7.7	7.4											
Fertilizers.....	43.9	48.8	39.4	37.2	35.9	35.0	34.1	34.8	35.0	32.4	31.6	34.1	36.9	36.6												
Vegetable and animal oils and fats.....	37.6	39.2	39.3	40.1	40.8	42.7	43.7	43.9	41.7	38.9	37.3	37.6	40.0	38.5												
Miscellaneous chemicals.....	108.9	108.1	107.1	106.3	104.7	106.2	108.2	107.2	107.5	108.1	105.3	105.1	104.6	101.0												
Products of petroleum and coal.....	234.0	232.3	232.4	232.2	232.4	231.9	232.2	231.7	229.7	231.7	229.9	237.5	233.8	233.4	228.2											
Petroleum refining.....	183.1	183.7	183.8	184.1	183.8	184.2	182.9	184.0	185.4	183.2	189.3	190.2	186.2	192.1												
Coke, other petroleum and coal products.....	40.2	48.7	48.4	48.3	48.1	48.0	48.8	45.7	46.3	48.7	48.2	48.1	47.2	46.1												
Rubber products.....	258.8	267.7	260.2	267.4	269.0	269.2	269.5	270.1	273.2	273.5	264.7	264.0	255.8	259.8	244.6											
Tires and inner tubes.....	103.7	104.4	105.1	104.0	105.3	105.5	106.1	107.0	108.0	108.0	105.4	105.7	107.0	101.0	100.8											
Rubber footwear.....	21.9	22.5	22.8	23.0	23.1	23.1	23.6	23.7	23.5	23.2	22.8	22.8	22.8	22.0	20.8											
Other rubber products.....	132.1	133.3	132.3	142.0	140.8	140.4	140.3	142.9	142.3	135.6	134.8	135.6	136.2	122.9												
Leather and leather products.....	365.1	357.8	359.3	370.4	370.9	370.9	372.5	372.6	372.0	372.1	371.7	375.1	374.4	372.2	367.2											
Leather: tanned, curried, and finished.....	34.0	34.1	34.4	34.8	35.6	35.8	35.9	36.2	36.9	37.1	36.9	37.4	37.1	37.1	37.9											
Industrial leather belting and packing.....	4.2	4.4	4.8	5.0	5.0	5.0	4.9	5.0	5.1	5.2	5.2	5.0	5.1	4.9	4.1											
Boot and shoe cut stock and findings.....	18.7	18.6	19.6	19.9	20.1	19.8	19.3	18.9	18.9	19.8	19.6	19.6	19.9	18.2												
Footwear (except rubber).....	239.0	240.1	246.8	248.0	249.8	249.4	248.5	244.7	248.8	253.3	252.2	252.2	248.0	238.1												
Luggage.....	15.7	15.6	15.6	15.1	15.0	15.1	15.4	16.2	16.1	16.7	16.5	16.3	16.3	15.0												
Handbags and small leather goods.....	30.2	30.9	33.5	33.3	31.7	32.4	32.6	34.1	33.2	32.2	30.2	28.8	31.2	29.0												
Gloves and miscellaneous leather goods.....	16.0	15.6	15.7	14.8	12.7	15.4	16.8	16.9	17.0	16.7	15.7	15.7	15.4	14.0												

See footnotes at end of table.



TABLE A-2. Employees in nonagricultural establishments, by industry<sup>1</sup>—Continued

Industry	1960												1959		Annual average	
	June <sup>1</sup>	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958	
<b>Transportation and public utilities</b> .....	3,943	3,925	3,917	3,900	3,887	3,882	3,940	3,912	3,910	3,927	3,922	3,949	3,944	3,902	3,903	
Transportation.....	2,593	2,586	2,579	2,570	2,553	2,549	2,602	2,571	2,568	2,574	2,562	2,589	2,592	2,559	2,531	
Interstate railroads.....	914.5	909.8	903.6	899.7	890.6	890.6	919.7	896.0	893.0	906.1	925.4	900.4	907.5	880.6	863.6	
Class I railroads.....	801.9	796.6	789.0	785.3	785.9	786.3	784.0	786.0	787.2	797.2	819.6	846.2	850.3	815.3	840.8	
Local railroads and buslines.....	91.2	91.4	91.2	90.9	91.2	91.4	91.8	91.7	92.1	92.1	92.0	92.3	92.3	92.3	96.4	
Trucking and warehousing.....	880.8	880.6	883.3	878.0	876.2	881.1	894.2	892.6	896.1	881.2	884.7	855.7	853.9	853.2	792.5	
Other transportation and services.....	699.5	697.6	692.1	684.7	681.0	681.0	684.2	684.4	685.2	694.1	687.2	680.1	687.6	683.3	678.5	
Buslines, except local.....	39.7	38.8	38.3	38.4	39.4	39.4	39.7	40.2	41.6	42.2	42.3	41.2	41.2	40.4	41.7	
Air transportation (common carrier).....	152.7	153.1	152.3	152.2	152.2	152.1	152.1	150.5	150.2	149.2	148.0	146.6	145.4	145.9	140.3	
Pipe-line transportation (except natural gas).....	24.1	24.1	24.2	24.2	24.6	24.6	24.7	24.8	25.2	25.6	25.9	25.6	25.1	25.1	25.8	
Communication.....	743	741	740	738	737	736	739	741	741	746	748	750	744	743	771	
Telephone.....	704.1	702.6	700.2	698.2	698.0	701.1	702.9	702.8	707.7	710.8	711.7	705.7	705.5	705.5	732.4	
Telegraph.....	36.5	37.0	36.7	36.7	36.9	36.9	37.5	37.5	37.2	37.2	36.8	37.2	37.2	37.2	38.3	
Other public utilities.....	607	598	598	592	597	597	599	600	601	607	612	610	608	600	601	
Gas and electric utilities.....	574.6	574.2	568.5	574.0	574.0	575.7	576.7	577.5	583.6	588.2	585.7	574.7	576.6	576.6	578.5	
Electric light and power utilities.....	253.9	254.0	253.8	253.8	254.1	254.7	254.9	255.0	258.1	260.2	259.4	258.2	255.9	255.9	258.3	
Gas utilities.....	153.1	153.4	153.0	153.2	152.9	153.4	153.7	153.7	155.8	156.6	156.6	156.3	156.3	156.3	151.5	
Electric light and gas utilities combined.....	167.6	166.8	161.7	167.0	167.0	167.6	168.1	168.8	170.2	171.4	170.0	161.9	167.4	168.7	168.7	
Local utilities, not elsewhere classified.....	23.7	23.8	23.5	23.2	23.1	23.1	23.2	23.4	23.7	24.0	23.9	23.6	23.2	22.9	22.9	
<b>Wholesale and retail trade</b> .....	11,603	11,536	11,520	11,325	11,329	11,424	12,345	11,723	11,551	11,464	11,360	11,324	11,332	11,385	11,141	
Wholesale trade.....	3,125	3,111	3,120	3,111	3,114	3,113	3,135	3,141	3,121	3,097	3,081	3,069	3,054	3,070	3,012	
Wholesaler—full-service and limited-function.....	1,851.4	1,856.4	1,850.4	1,822.9	1,822.9	1,822.9	1,882.9	1,868.8	1,858.3	1,847.9	1,836.0	1,820.6	1,813.2	1,819.2	1,752.0	
Automotive.....	140.5	139.6	139.0	138.7	138.0	138.0	139.2	138.6	138.5	138.2	139.2	137.3	133.2	133.2	126.8	
Groceries, food specialties, beer, wines, and liquors.....	313.4	315.1	317.8	316.1	317.9	321.3	320.9	314.0	311.2	308.8	308.8	306.6	306.7	306.2	306.2	
Electrical goods, machinery, hardware, and plumbing equipment.....	455.6	455.5	455.0	454.8	453.3	456.4	455.1	454.5	452.9	453.8	452.0	449.2	448.0	439.3	439.3	
Other full-service and limited-function wholesalers.....	941.9	946.2	938.6	943.3	943.5	945.0	966.0	954.2	951.3	945.4	937.7	925.8	921.7	926.3	883.2	
Wholesale distributors, other.....	1,259.4	1,263.1	1,260.8	1,260.8	1,260.7	1,272.0	1,271.8	1,263.0	1,248.8	1,245.2	1,248.6	1,240.9	1,250.7	1,261.4	1,261.4	
Retail trade.....	8,478	8,425	8,400	8,214	8,215	8,311	9,190	8,582	8,430	8,367	8,279	8,255	8,298	8,315	8,128	
General merchandise stores.....	1,464.4	1,511.0	1,404.3	1,402.3	1,404.9	1,464.9	2,025.0	1,628.8	1,620.8	1,603.2	1,407.6	1,422.4	1,453.5	1,453.8	1,453.8	
Department stores and general mail-order houses.....	530.9	544.8	502.1	498.3	492.7	524.3	724.3	574.5	544.1	532.2	502.1	498.0	508.2	530.1	508.7	
Food and liquor stores.....	1,648.4	1,649.0	1,633.6	1,634.8	1,629.7	1,663.3	1,645.6	1,627.0	1,612.1	1,604.2	1,600.3	1,616.6	1,613.6	1,608.8	1,608.8	
Grocery, meat, and vegetable markets.....	1,200.0	1,199.8	1,200.1	1,197.0	1,198.2	1,218.4	1,209.3	1,191.1	1,172.1	1,161.9	1,158.4	1,173.4	1,175.5	1,149.4	1,149.4	
Dairy product stores and dealers.....	223.7	220.2	214.9	214.5	214.9	217.1	217.2	218.3	226.9	230.6	231.0	228.1	222.7	222.7	222.7	
Other food and liquor stores.....	818.0	815.0	801.2	801.1	799.7	814.8	803.8	802.2	799.1	800.6	798.9	796.1	791.0	794.5	794.5	
Automotive and accessories dealers.....	625.0	679.6	584.4	584.4	609.1	744.0	634.5	621.2	605.1	568.8	572.1	602.2	606.0	562.1	562.1	
Apparel and accessories stores.....	3,868.8	3,845.5	3,790.8	3,792.3	3,807.3	3,943.0	3,869.5	3,868.8	3,867.2	3,897.6	3,887.0	3,890.8	3,820.4	3,786.4	3,786.4	
Furniture and appliance stores.....	399.7	397.4	395.1	396.7	397.3	417.0	405.1	398.5	389.3	385.7	389.4	378.8	378.2	378.2	378.2	
Drug stores.....	392.4	396.4	384.2	383.3	380.6	418.4	380.8	385.4	389.3	385.7	389.4	378.8	378.2	378.2	378.2	
<b>Finance, insurance, and real estate</b> .....	2,493	2,468	2,463	2,441	2,429	2,429	2,438	2,438	2,441	2,452	2,474	2,475	2,425	2,374	2,374	
Banks and trust companies.....	963.1	963.2	961.9	957.5	957.5	957.5	957.5	957.5	957.5	957.5	957.5	957.5	957.5	957.5	957.5	
Security dealers and exchanges.....	100.0	99.9	99.7	99.2	99.2	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
Insurance carriers and agents.....	922.8	922.5	919.9	917.3	910.3	913.6	910.8	910.8	909.9	915.4	914.1	902.4	904.0	895.0	895.0	
Other finance agencies and real estate.....	782.4	777.4	762.9	764.9	768.5	773.7	779.4	788.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	
<b>Service and miscellaneous</b> .....	6,743	6,715	6,744	6,511	6,484	6,474	6,547	6,593	6,614	6,617	6,582	6,603	6,623	6,528	6,395	
Hotels and lodging places.....	494.0	479.3	458.6	459.6	452.7	453.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	
Personal services.....	310.9	308.4	304.6	305.7	307.2	309.0	310.6	312.2	313.4	315.8	317.5	316.9	310.9	312.7	312.7	
Laundries.....	178.9	177.4	169.3	170.0	171.9	173.4	174.7	174.4	176.9	165.6	169.3	176.0	170.6	167.4	167.4	
Cleaning and dyeing plants.....	190.6	189.7	175.3	178.0	178.9	179.8	185.6	190.0	194.2	195.9	192.9	191.7	187.0	186.8	186.8	
Motion pictures.....	8,381	8,438	8,553	8,536	8,543	8,588	8,635	8,331	8,274	8,158	7,813	7,837	8,045	8,127	7,893	
<b>Government</b> .....	2,191	2,212	2,234	2,231	2,153	2,151	2,492	2,192	2,168	2,164	2,183	2,190	2,182	2,197	2,191	
Federal.....	2,184.7	2,206.8	2,203.6	2,125.3	2,123.6	2,123.6	2,464.5	2,164.7	2,140.9	2,136.2	2,155.2	2,162.0	2,156.9	2,169.4	2,164.2	
Executive.....	917.1	916.5	919.0	920.2	921.3	921.3	921.3	921.3	931.4	934.4	941.5	949.6	941.3	941.3	941.3	
Department of Defense.....	553.3	553.0	551.8	553.0	553.6	553.6	553.6	557.5	551.2	550.5	551.3	549.4	547.3	572.9	562.8	
Post Office Department.....	714.3	837.3	832.8	832.1	832.1	832.1	832.1	832.1	832.1	832.1	832.1	832.1	832.1	832.1	832.1	
Other agencies.....	22.5	22.5	22.5	22.4	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.1	
Legislative.....	4.9	4.9	4.9	4.9	4.9	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.7	
Judicial.....	6,190	6,225	6,219	6,205	6,190	6,187	6,143	6,139	6,106	6,094	6,030	5,647	5,890	5,830	5,702	
State and local.....	1,577.6	1,572.8	1,564.1	1,559.8	1,559.8	1,555.4	1,555.6	1,550.6	1,517.9	1,467.9	1,480.1	1,419.1	1,424.3	1,470.8	1,470.8	
State.....	4,648.7	4,646.4	4,641.1	4,630.1	4,596.8	4,587.6	4,582.9	4,582.9	4,476.2	4,462.4	4,466.7	4,380.7	4,405.7	4,421.1	4,421.1	
Local.....	2,972.4	2,987.4	2,992.0	2,990.9	2,947.8	2,945.7	2,945.0	2,945.0	2,906.4	2,906.4	2,906.4	2,906.4	2,906.4	2,906.4	2,906.4	
Education.....	3,253.9	3,231.8	3,213.2	3,199.0	3,189.2	3,184.3	3,184.3	3,184.3	3,200.0	3,248.0	3,300.3	3,311.3	3,262.3	3,208.5	3,184.2	
Other.....	3,253.9	3,231.8	3,213.2	3,199.0	3,189.2	3,184.3	3,184.3	3,184.3	3,200.0	3,248.0	3,300.3	3,311.3	3,262.3	3,208.5	3,184.2	

<sup>1</sup> Beginning with the August 1958 issue, figures for 1956-58 differ from those previously published because of the adjustment of the employment estimates to 1st quarter 1957 benchmark levels indicated by data from government social insurance programs. Statistics from 1957 forward are subject to revision when new benchmarks become available.

These series are based upon establishment reports which cover all full- and part-time employees in nonagricultural establishments who worked during, or received pay for, any part of the pay period ending nearest the 15th of the month. Therefore, persons who worked in more than 1 establishment during the reporting period are counted more than once. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded.

<sup>2</sup> Preliminary.

<sup>3</sup> Data relate to civilian employees who worked on, or received pay for, the last day of the month.

<sup>4</sup> State and local government data exclude, as nominal employees, elected officials of small local units and paid volunteer firemen.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics for all series except those for the Federal Government, which is prepared by the U.S. Civil Service Commission, and that for Class I railroads, which is prepared by the U.S. Interstate Commerce Commission.



TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry<sup>1</sup>

Industry	[In thousands]															Annual average	
	1960										1959					1959	1958
	June <sup>2</sup>	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June				
Mining.....	535	533	524	527	518	527	519	481	479	494	562	565	532	572			
Metal.....	80.3	79.3	77.6	73.4	60.6	57.2	54.9	33.7	34.0	45.1	80.1	80.9	65.1	70.5			
Iron.....	31.0	29.5	28.8	28.6	28.4	28.2	25.9	5.3	5.3	6.0	30.2	30.5	22.7	26.1			
Copper.....	25.9	25.7	24.8	21.1	8.5	5.6	5.5	6.1	6.4	14.4	25.3	25.6	18.0	23.4			
Lead and zinc.....	9.4	10.1	10.2	10.1	10.1	9.9	9.8	9.3	9.3	10.4	10.2	10.3	10.0	10.5			
Anthracite.....	10.5	11.5	12.4	13.9	13.9	14.1	14.3	14.3	13.9	12.8	15.5	13.6	14.6	18.5			
Bituminous coal.....	148.0	149.5	182.0	154.1	154.4	155.1	144.9	128.5	119.0	118.6	152.5	158.5	149.2	173.8			
Crude-petroleum and natural-gas production.....	199.7	199.5	197.7	199.8	202.7	208.3	209.6	206.4	215.7	216.0	218.0	216.8	210.2	211.1			
Petroleum and natural-gas production (except contract services).....	102.0	101.8	102.5	103.3	103.9	104.6	104.8	105.2	107.6	109.3	108.4	107.3	106.1	112.9			
Nonmetallic mining and quarrying.....	96.7	93.1	83.9	85.3	86.1	92.6	95.3	95.3	96.4	97.3	95.5	95.0	92.5	91.9			
Contract construction.....	2,425	2,190	1,914	1,959	2,947	2,289	2,445	2,551	2,637	2,699	2,632	2,583	2,372	2,278			
Nonbuilding construction.....	519	424	340	353	360	439	507	554	581	606	608	604	506	497			
Highway and street construction.....	258.1	196.2	136.3	142.9	142.2	195.2	245.0	283.8	303.4	320.1	315.6	307.2	245.4	245.4			
Other nonbuilding construction.....	260.6	227.4	203.3	210.4	214.9	243.8	261.8	269.9	277.5	285.6	290.1	297.2	260.5	265.1			
Building construction.....	1,909	1,766	1,574	1,635	1,887	1,850	1,938	1,997	2,056	2,093	2,026	1,979	1,866	1,781			
General contractors.....	675.2	609.5	513.4	542.2	564.0	629.0	667.6	703.8	729.2	730.9	737.2	724.3	662.4	658.1			
Special-trade contractors.....	1,233.3	1,156.3	1,060.3	1,092.6	1,123.2	1,220.9	1,270.4	1,293.4	1,326.6	1,342.4	1,288.8	1,254.6	1,203.2	1,122.6			
Plumbing and heating.....	248.3	235.4	224.1	230.3	229.3	251.6	256.3	265.2	270.8	271.9	264.6	255.2	232.8	247.0			
Painting and decorating.....	200.6	176.3	160.3	159.3	163.1	184.6	201.3	207.4	218.6	225.4	218.3	197.2	181.7	158.3			
Electrical work.....	138.9	133.3	128.6	132.0	134.4	138.8	143.0	144.5	148.4	147.9	142.8	140.7	138.3	138.2			
Other special-trade contractors.....	645.5	611.3	547.3	572.0	586.4	646.0	669.8	676.3	688.9	697.2	662.7	660.5	630.4	584.1			
Manufacturing.....	12,314	12,363	12,334	12,435	12,494	12,449	12,466	12,274	12,201	12,373	12,173	12,433	12,534	12,237			
Durable goods.....	7,047	7,089	7,123	7,205	7,268	7,230	7,173	6,922	6,786	6,847	6,679	7,161	7,248	6,955			
Nondurable goods.....	5,267	5,214	5,211	5,230	5,226	5,219	5,293	5,352	5,415	5,526	5,494	5,272	5,276	5,282			
Durable goods.....	69.7	73.2	73.8	74.9	74.7	74.3	74.0	72.9	73.4	73.5	71.1	72.2	72.9	68.4			
Ordinance and accessories.....	612.7	592.0	568.6	555.7	560.6	561.4	583.6	599.3	612.0	619.7	628.4	627.0	623.8	591.1			
Lumber and wood products (except furniture).....	100.5	86.1	83.9	85.5	86.5	95.4	96.5	101.2	101.7	107.8	108.6	105.2	92.3	80.1			
Logging camps and contractors.....	289.5	281.6	275.1	276.7	277.0	286.3	294.5	300.0	304.2	305.2	302.2	302.4	291.5	293.6			
Sawmills and planing mills.....	111.5	110.9	109.0	110.5	110.3	113.6	116.7	120.8	123.8	125.3	125.4	130.1	117.7	106.5			
Millwork, plywood, and prefabricated structural wood products.....	40.9	39.7	38.2	38.3	38.3	39.1	38.5	39.7	39.7	39.4	41.0	41.8	40.2	40.6			
Wooden containers.....	49.6	50.3	49.5	49.6	49.3	49.2	50.0	50.3	50.5	50.5	49.8	50.3	49.4	46.0			
Miscellaneous wood products.....	326.8	325.0	327.2	326.9	327.6	327.4	327.8	327.2	328.6	329.1	328.9	319.5	320.7	321.2			
Furniture and fixtures.....	249.2	242.7	242.9	244.0	244.0	243.9	243.9	246.6	247.2	246.3	242.2	237.9	238.0	240.5			
Household furniture.....	37.7	38.0	37.7	37.2	36.8	36.7	36.6	37.5	37.8	37.7	35.9	36.0	35.9	34.2			
Office, public building, and professional furniture.....	27.5	27.2	26.7	27.0	27.4	27.1	26.7	24.7	24.9	24.6	26.8	26.7	25.6	25.6			
Partitions, shelving, lockers, and fixtures.....	19.6	19.3	19.6	19.4	19.2	18.1	17.3	19.2	20.1	19.4	18.9	20.0	18.9	17.4			
Screens, blinds, and miscellaneous furniture and fixtures.....	453.5	451.9	448.2	443.0	445.2	442.6	452.4	457.1	458.7	469.2	468.3	463.5	465.8	449.1			
Stone, clay, and glass products.....	26.6	27.5	30.2	32.0	32.2	32.3	32.1	32.6	30.4	29.9	28.9	29.2	28.7	23.5			
Flint glass.....	90.7	89.3	88.9	87.5	84.7	85.9	87.2	83.0	88.6	87.4	85.7	88.1	84.7	80.5			
Glass and glassware, pressed or blown.....	13.7	13.7	14.1	14.5	14.5	14.8	15.3	15.6	15.5	15.5	14.8	14.8	15.0	13.3			
Glass products made of purchased glass.....	34.7	33.7	31.6	31.0	32.5	33.9	34.3	33.7	35.8	36.3	36.0	35.8	34.4	34.6			
Cement, hydraulic.....	65.9	64.5	62.2	62.6	63.1	66.0	67.2	67.5	67.5	68.7	68.5	68.4	65.5	63.4			
Structural clay products.....	41.7	42.3	42.5	42.4	41.9	42.0	43.0	43.1	43.5	42.8	42.4	42.4	41.3	37.6			
Pottery and related products.....	93.2	91.0	86.8	87.7	87.8	91.7	94.0	97.2	101.0	101.7	99.9	99.2	94.3	86.9			
Concrete, gypsum, and plaster products.....	15.6	15.4	14.9	15.0	14.9	15.3	15.6	15.9	16.0	16.1	15.9	15.9	15.6	18.7			
Out-stone and stone products.....	69.8	70.8	71.8	72.5	71.0	70.5	68.4	59.6	70.9	70.4	71.5	72.2	66.6	62.3			
Miscellaneous nonmetallic mineral products.....	909.3	994.5	1,019.8	1,042.6	1,051.5	1,048.3	1,038.8	975.0	902.3	911.0	928.0	1,038.4	1,000.5	916.4			
Primary metal industries.....	496.3	510.6	538.4	531.6	531.6	527.7	493.2	418.8	423.3	432.4	521.2	543.1	416.6	438.8			
Blast furnaces, steel works, and rolling mills.....	189.7	194.0	194.7	198.8	197.7	197.6	183.2	194.2	195.6	194.1	197.7	199.8	192.2	167.4			
Iron and steel foundries.....	46.1	47.2	45.4	42.5	40.7	37.4	32.4	32.9	33.3	43.2	44.5	44.1	40.0	43.2			
Primary smelting and refining of non-ferrous metals.....	8.8	9.1	9.3	9.3	9.4	9.2	8.8	8.8	8.8	9.4	9.4	9.4	9.1	8.2			
Secondary smelting and refining of non-ferrous metals.....	84.1	85.6	87.0	87.4	88.1	89.1	89.1	89.9	90.5	89.8	92.2	92.7	89.2	86.6			
Rolling, drawing, and alloying of non-ferrous metals.....	49.5	51.2	53.7	55.2	55.4	55.2	54.3	55.7	54.3	52.5	53.4	53.4	53.3	46.4			
Nonferrous foundries.....	130.0	122.1	126.1	126.7	125.4	122.6	114.0	102.0	105.2	108.2	120.9	124.0	116.0	108.4			
Miscellaneous primary metal industries.....	838.7	835.3	836.8	853.8	863.3	856.6	840.9	799.9	811.8	841.4	815.2	846.0	865.8	831.6			
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	53.4	51.7	51.3	50.3	50.8	49.1	48.2	49.1	47.7	46.5	55.0	55.4	51.9	50.6			
Tin cans and other tinware.....	104.5	105.4	109.1	111.7	111.9	110.2	95.0	101.9	110.0	106.3	104.4	108.4	106.2	100.1			
Cutlery, handtools, and hardware.....	88.1	88.5	88.5	89.5	89.0	86.8	89.2	93.1	94.0	92.9	89.2	91.5	89.5	83.3			
Heating apparatus (except electric) and plumbers' supplies.....	203.8	199.7	200.6	200.7	199.5	199.3	192.8	181.4	190.2	195.6	221.5	220.7	203.4	220.0			
Fabricated structural metal products.....	192.6	193.7	201.9	207.1	202.4	196.2	179.5	193.9	196.4	177.1	180.0	191.5	187.8	169.4			
Metal stamping, coating, and engraving.....	37.0	38.6	39.5	39.8	39.4	39.0	38.8	40.5	40.4	38.2	36.9	38.2	38.5	34.2			
Lighting fixtures.....	46.0	46.6	48.4	49.2	48.7	47.7	43.8	43.4	43.8	41.9	44.9	46.5	45.4	41.7			
Fabricated wire products.....	109.9	112.6	114.5	115.0	114.9	112.6	110.6	108.5	108.9	106.6	109.0	113.6	108.9	96.5			
Miscellaneous fabricated metal products.....																	

See footnotes at end of table.

TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry<sup>1</sup>—Continued

Industry	1960						1959						Annual average		
	June <sup>2</sup>	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
Manufacturing—Continued															
Durable goods—Continued															
Machinery (except electrical).....	1,155.9	1,163.1	1,176.4	1,186.1	1,191.0	1,178.8	1,166.0	1,135.9	1,146.8	1,167.1	1,137.7	1,149.4	1,167.0	1,134.1	1,039.3
Engines and turbines.....	65.0	65.8	68.2	68.4	69.5	68.3	66.0	67.1	68.1	65.2	66.4	67.5	65.9	60.7	60.7
Agricultural machinery and tractors.....	101.8	105.5	110.9	112.3	110.1	106.5	94.5	103.9	119.8	111.8	124.6	127.1	112.4	94.7	94.7
Construction and mining machinery.....	90.0	91.4	91.9	91.4	89.9	88.7	84.7	83.6	91.6	90.7	94.1	95.5	89.6	82.4	82.4
Metalworking machinery.....	195.5	196.4	195.1	192.1	190.7	189.7	186.7	184.0	182.1	176.1	178.5	178.3	175.6	162.1	162.1
Special-industry machinery (except metalworking machinery).....	123.4	123.1	122.6	122.3	121.4	120.7	120.2	118.2	119.1	116.3	114.9	115.6	114.9	108.8	108.8
General industrial machinery.....	146.5	147.5	149.0	149.8	146.4	146.2	146.0	146.5	146.1	146.5	143.1	143.3	141.9	138.1	138.1
Office and store machines and devices.....	92.1	92.9	92.4	92.1	92.6	92.7	92.0	91.6	90.4	88.6	87.7	90.2	89.7	84.9	84.9
Service-industry and household machines.....	146.9	148.4	146.0	149.2	145.4	140.9	136.3	138.4	138.3	138.0	138.3	141.1	138.1	128.2	128.2
Miscellaneous machinery parts.....	201.9	205.4	210.0	213.4	212.8	212.3	209.5	211.4	211.6	204.5	204.8	210.4	206.0	188.6	188.6
Electrical machinery.....	852.7	855.1	860.4	878.7	890.0	892.1	891.9	881.6	893.3	888.4	849.6	835.9	832.5	830.7	790.1
Electrical generating, transmission, distribution, and industrial apparatus.....	279.8	283.1	287.2	289.0	287.8	284.7	275.4	281.6	286.5	281.3	277.8	277.9	273.7	247.8	247.8
Electrical appliances.....	29.0	29.5	30.4	30.0	29.8	29.8	29.9	30.6	30.0	28.4	27.3	27.5	28.2	25.4	25.4
Insulated wire and cable.....	22.0	21.8	22.2	22.5	22.9	22.7	22.2	22.2	21.5	21.1	20.4	21.4	21.6	19.3	19.3
Electrical equipment for vehicles.....	54.3	56.0	59.0	60.9	60.3	58.5	54.9	57.9	56.7	45.7	52.9	54.3	54.4	47.0	47.0
Electric lamps.....	25.8	25.9	26.9	25.9	25.9	25.8	25.6	25.5	24.8	24.0	23.8	23.7	23.9	22.5	22.5
Communication equipment.....	408.2	408.8	418.7	426.3	429.5	433.2	435.8	437.2	430.2	412.8	397.9	391.8	401.6	355.4	355.4
Miscellaneous electrical products.....	36.0	35.3	35.3	35.4	35.9	37.2	37.8	38.3	38.7	36.3	35.8	35.9	36.3	32.7	32.7
Transportation equipment.....	1,138.9	1,175.1	1,187.1	1,221.2	1,244.8	1,238.7	1,172.1	1,026.0	1,207.8	1,100.8	1,132.0	1,207.4	1,224.0	1,189.5	1,124.0
Motor vehicles and equipment.....	615.1	622.9	651.9	678.2	657.7	657.7	652.7	659.0	622.5	592.5	519.7	586.3	598.1	574.2	480.0
Aircraft and parts.....	389.5	398.1	407.1	411.7	416.1	422.1	428.8	435.2	445.3	444.5	448.6	451.3	451.1	479.3	479.3
Aircraft.....	228.5	229.1	233.5	237.5	240.8	243.7	249.4	254.0	262.7	263.7	264.8	265.0	268.1	291.8	291.8
Aircraft engines and parts.....	83.0	83.3	83.9	83.2	83.2	84.9	85.6	85.8	85.6	83.7	86.4	86.8	86.5	89.0	89.0
Aircraft propellers and parts.....	8.5	8.5	8.6	8.4	8.5	8.4	8.3	8.7	8.9	8.9	9.2	9.3	9.1	12.2	12.2
Other aircraft parts and equipment.....	74.5	77.2	81.1	82.6	83.6	85.1	85.5	86.7	88.1	88.2	88.2	89.2	87.4	88.7	88.7
Ship and boat building and repairing.....	115.6	113.1	109.8	108.7	120.8	116.3	117.5	107.0	107.1	116.5	120.5	124.3	118.8	121.4	121.4
Shipbuilding and repairing.....	93.8	90.9	88.1	87.4	100.2	96.2	98.1	88.6	88.6	100.1	102.3	103.5	99.9	108.1	108.1
Boatbuilding and repairing.....	21.8	22.2	21.7	21.3	20.6	20.1	19.4	18.4	17.3	16.4	18.2	20.8	18.9	16.8	16.8
Railroad equipment.....	46.5	44.7	44.0	41.5	37.2	33.3	32.2	34.0	38.8	42.3	43.2	41.7	37.1	36.1	36.1
Other transportation equipment.....	8.4	8.3	8.4	7.7	6.9	7.7	8.5	9.1	9.1	9.0	8.8	8.6	8.3	7.2	7.2
Instruments and related products.....	227.9	227.5	229.8	230.5	231.3	230.5	232.2	231.9	231.9	230.7	224.0	220.8	223.5	222.3	208.3
Laboratory, scientific and engineering instruments.....	35.8	36.0	36.0	36.1	36.2	37.4	37.2	36.9	36.5	35.1	33.5	35.0	35.1	31.8	31.8
Mechanical measuring and controlling instruments.....	66.5	66.8	66.9	67.3	65.9	65.0	64.4	65.8	65.1	63.5	62.9	63.9	62.4	58.8	58.8
Optical instruments and lenses.....	12.7	12.7	12.5	12.1	12.1	11.5	12.0	11.6	11.2	10.8	10.3	10.1	10.7	9.4	9.4
Surgical, medical, and dental instruments.....	30.1	30.4	30.2	30.1	29.7	30.0	29.5	29.0	29.2	28.4	27.7	28.4	28.7	27.3	27.3
Ophthalmic goods.....	21.5	21.7	21.9	22.1	22.3	22.4	22.3	22.0	21.6	20.9	20.1	20.2	20.6	18.4	18.4
Photographic apparatus.....	38.6	38.7	38.8	39.0	39.6	40.5	40.5	39.8	40.0	39.7	39.3	39.3	39.3	36.7	36.7
Watches and clocks.....	22.3	23.5	24.2	24.6	24.7	25.4	26.0	26.8	26.8	25.6	24.8	25.6	25.6	22.9	22.9
Miscellaneous manufacturing industries.....	401.0	396.5	395.1	391.9	387.5	379.1	393.0	414.8	420.0	416.6	400.7	380.2	385.3	386.6	351.0
Jewelry, silverware, and plated ware.....	35.3	36.5	37.1	36.7	36.6	37.8	38.2	38.1	37.3	36.2	34.5	35.5	36.1	34.8	34.8
Musical instruments and parts.....	18.4	15.7	16.0	16.2	16.3	16.7	16.7	16.7	16.0	15.8	15.3	12.6	15.0	13.6	13.6
Toys and sporting goods.....	78.6	73.4	67.2	62.7	59.0	64.6	80.7	85.9	85.1	80.1	72.6	73.7	70.7	67.8	67.8
Pens, pencils, other office supplies.....	23.4	23.4	23.2	23.1	22.4	22.9	24.1	24.3	24.1	23.5	22.9	22.7	22.8	22.3	22.3
Costume jewelry, buttons, notions.....	46.5	47.9	50.0	50.0	48.7	49.4	49.9	50.6	50.7	50.4	47.7	47.9	48.8	46.4	46.4
Fabricated plastic products.....	74.1	74.9	75.0	76.2	75.7	76.3	77.0	77.2	76.4	73.4	71.6	72.3	72.9	64.8	64.8
Other manufacturing industries.....	122.2	123.3	123.4	122.6	120.4	125.3	128.2	127.2	127.0	121.8	118.6	120.6	120.5	111.9	111.9
Nondurable goods															
Food and kindred products.....	1,015.6	967.6	959.5	933.7	938.6	954.0	989.5	1,031.8	1,080.1	1,152.0	1,176.0	1,061.7	1,029.8	1,025.3	1,034.8
Meat products.....	237.2	232.1	233.8	237.2	240.6	244.8	243.6	233.4	229.0	249.2	245.2	244.5	240.6	243.5	243.5
Dairy products.....	66.4	63.7	60.7	59.6	60.0	60.0	63.7	68.9	71.0	72.0	72.0	72.3	65.5	66.7	66.7
Canning and preserving.....	150.4	152.0	133.6	134.1	136.5	149.6	177.9	225.9	316.2	314.8	218.6	179.9	189.2	186.6	186.6
Grain-mill products.....	75.0	74.4	73.9	74.1	74.1	75.2	74.8	77.7	79.9	79.6	78.9	79.7	77.9	79.5	79.5
Bakery products.....	160.5	161.7	160.8	160.9	160.6	162.7	165.7	165.7	165.0	165.6	162.5	162.3	162.1	164.9	164.9
Sugar.....	19.8	20.8	19.3	20.3	20.4	20.3	20.3	20.3	20.3	22.2	20.3	20.1	20.3	20.9	20.9
Confectionery and related products.....	54.9	55.4	57.2	57.8	58.4	62.9	64.0	64.5	63.8	69.4	64.2	67.0	69.4	61.6	61.6
Beverages.....	112.1	108.9	104.9	103.2	104.1	108.8	113.4	117.6	120.7	118.4	115.8	116.0	111.8	112.4	112.4
Miscellaneous food products.....	91.3	90.5	89.5	91.4	90.4	90.2	92.6	94.7	95.2	95.7	94.0	97.8	93.8	94.2	94.2
Tobacco manufactures.....	67.8	68.1	71.2	76.4	78.2	80.9	82.2	92.8	98.4	89.7	67.2	69.9	78.9	81.1	81.1
Cigarettes.....	32.5	32.6	32.1	32.4	32.5	32.5	32.5	32.5	32.6	32.5	30.6	32.4	32.2	31.5	31.5
Cigars.....	23.8	24.0	24.1	24.8	23.8	23.5	23.5	23.5	23.5	23.5	23.2	24.1	23.4	23.4	27.4
Tobacco and snuff.....	5.2	5.2	5.3	5.4	5.3	5.3	5.4	5.4	5.6	5.7	5.7	5.8	5.5	5.4	5.4
Tobacco stemming and redrying.....	7.3	7.3	9.7	13.8	16.6	17.6	18.3	29.1	34.7	26.0	6.9	6.3	15.8	15.8	15.8

See footnotes at end of table.

TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry<sup>1</sup>—Continued

	[In thousands]														
Industry	1960						1959						Annual average		
	June <sup>1</sup>	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
Manufacturing—Continued															
Nondurable goods—Continued															
Textile-mill products.....	863.6	863.7	861.4	863.0	859.5	850.7	867.4	875.6	885.3	886.6	886.7	872.1	882.8	873.9	880.4
Scouring and combing plants.....	4.9	4.8	4.8	4.8	5.1	5.1	4.9	4.8	5.1	5.2	5.3	5.2	5.1	5.0	4.4
Yarn and thread mills.....	97.7	97.7	98.0	98.3	98.3	99.0	98.8	100.4	101.9	103.2	103.0	102.7	103.1	101.5	99.7
Broad-woven fabric mills.....	364.8	366.9	368.5	368.8	368.8	368.0	369.9	370.2	371.5	371.5	367.8	371.3	371.3	370.5	372.4
Narrow fabric and smallwares.....	25.6	25.8	26.1	26.0	26.1	25.8	25.8	25.8	25.9	26.3	26.2	26.1	26.6	25.9	23.9
Knitting mills.....	201.1	196.7	195.0	191.2	189.7	189.7	195.7	203.6	207.5	206.5	209.7	200.7	204.8	199.7	186.8
Dyeing and finishing textiles.....	77.7	77.8	76.6	77.3	77.4	77.1	77.3	77.5	77.5	77.5	76.8	76.4	77.6	76.6	73.7
Carpets, rugs, other floor coverings.....	37.3	38.0	38.4	39.0	38.8	38.6	38.5	39.1	38.8	38.0	38.0	38.0	38.0	38.9	36.7
Hats (except cloth and millinery).....	8.9	8.3	8.9	8.6	9.1	9.2	8.9	8.4	9.0	9.1	8.7	8.0	8.9	8.9	9.0
Miscellaneous textile goods.....	45.7	45.4	46.7	47.2	46.5	46.4	46.1	46.4	46.6	46.6	47.1	46.6	47.3	46.9	43.9
Apparel and other finished textile products.....	1,078.2	1,080.3	1,082.4	1,118.2	1,111.1	1,090.8	1,102.5	1,107.0	1,100.0	1,106.2	1,102.7	1,047.5	1,067.9	1,080.0	1,027.0
Men's and boys' suits and coats.....	163.3	162.3	163.1	162.5	162.5	162.2	162.4	162.6	161.7	162.4	161.8	163.1	161.4	161.9	94.0
Men's and boys' furnishings and work clothing.....	324.0	318.8	320.9	319.2	316.2	318.4	321.1	320.4	320.5	318.6	309.0	310.5	308.5	283.9	
Women's outerwear.....	293.5	300.9	322.6	319.8	311.1	313.8	311.3	299.5	306.2	311.3	293.3	299.4	308.0	302.7	
Women's, children's undergarments.....	165.5	167.5	168.9	168.6	165.8	168.7	111.1	111.1	109.7	107.7	100.0	104.4	106.2	101.9	
Millinery.....	13.4	15.9	20.7	20.1	17.1	16.2	15.0	16.4	16.4	16.4	17.4	16.4	11.5	16.3	15.7
Children's outerwear.....	65.0	61.9	66.1	66.2	65.7	64.5	64.5	64.3	66.2	68.0	66.0	68.5	66.3	63.1	
Fur goods.....	5.2	4.9	4.8	5.0	5.0	6.8	7.3	7.7	7.4	6.4	7.8	7.5	7.1	8.2	
Miscellaneous apparel and accessories.....	53.7	54.4	54.1	53.3	51.9	54.8	56.8	57.9	58.0	56.8	51.8	54.6	54.4	80.9	
Other fabricated textile products.....	116.7	115.8	117.0	116.4	114.8	116.9	117.0	121.0	119.4	119.4	114.7	116.1	113.7	103.6	
Paper and allied products.....	452.8	448.5	448.3	446.4	445.8	447.2	450.5	452.3	453.6	459.7	454.3	449.0	453.3	448.6	439.3
Pulp, paper, and paperboard mills.....	222.4	222.5	221.5	221.6	223.3	222.2	222.2	222.1	227.0	225.6	225.9	227.0	223.1	220.7	
Paperboard containers and boxes.....	121.4	121.3	121.8	121.7	121.4	125.2	127.1	127.4	127.3	123.9	120.8	122.0	122.9	119.6	
Other paper and allied products.....	104.7	104.5	103.1	102.6	102.5	103.1	103.0	104.1	105.4	103.8	102.3	103.3	102.6	99.0	
Printing, publishing, and allied industries.....	571.2	567.6	567.5	567.6	565.1	562.4	570.6	570.2	569.8	569.8	558.2	552.1	554.9	557.5	545.4
Newspapers.....	164.4	162.9	162.6	161.5	161.5	163.8	163.6	164.1	163.8	161.0	159.9	160.7	161.0	161.0	187.2
Periodicals.....	27.0	27.7	27.6	27.4	27.4	27.2	27.5	27.6	27.4	26.0	25.8	25.8	26.5	25.5	
Books.....	38.1	37.6	37.2	37.0	36.6	36.4	36.3	36.3	37.0	36.4	34.4	35.2	35.5	33.7	
Commercial printing.....	182.4	184.6	185.4	184.4	185.0	184.4	184.4	183.8	183.4	179.0	178.8	178.9	180.2	177.5	
Lithographing.....	51.7	52.1	51.5	50.7	48.9	50.3	51.5	51.1	51.0	50.1	49.7	49.9	50.1	49.2	
Greeting cards.....	14.6	14.5	14.0	13.7	13.5	15.4	16.7	16.1	16.3	15.6	15.3	15.5	15.0	14.2	
Bookbinding and related industries.....	37.6	37.6	37.6	37.2	36.4	36.8	36.7	37.5	37.7	37.2	36.0	36.3	36.3	33.0	
Miscellaneous publishing and printing services.....	51.8	50.5	51.7	53.2	53.1	53.3	53.5	53.3	53.2	52.9	52.7	52.6	52.8	52.6	
Chemicals and allied products.....	539.0	548.0	551.0	540.5	537.3	535.9	537.1	539.0	540.0	536.9	532.1	526.6	526.9	530.9	512.2
Industrial inorganic chemicals.....	69.3	69.3	68.7	68.8	69.1	69.6	69.7	69.2	69.4	69.2	68.9	68.1	68.4	67.3	
Industrial organic chemicals.....	211.3	208.9	208.7	207.7	208.0	206.8	206.9	206.7	208.0	207.8	205.7	204.4	203.3	191.8	
Drugs and medicines.....	56.6	56.7	57.3	57.0	57.6	57.3	56.9	56.9	57.6	57.5	57.2	56.8	57.1	57.6	
Soup, cleaning and polishing preparations.....	30.9	30.8	30.7	30.4	30.2	30.2	30.1	30.4	30.8	30.6	30.2	30.3	30.3	30.1	
Paints, pigments, and fillers.....	46.2	46.1	45.7	44.9	45.3	45.8	45.8	46.6	45.7	45.9	45.6	45.4	45.4	43.7	
Gum and wood chemicals.....	6.4	6.4	6.3	6.5	6.4	6.4	6.3	6.3	6.4	6.3	6.4	6.1	6.3	6.4	
Fertilizers.....	34.0	35.7	36.5	37.4	36.3	34.9	34.0	34.7	34.9	22.6	21.7	21.3	20.9	20.1	
Vegetable and animal oils and fats.....	25.1	26.5	26.6	27.4	27.9	29.4	30.4	30.8	28.5	25.1	24.4	24.7	27.2	26.1	
Miscellaneous chemicals.....	68.2	67.6	67.0	66.2	65.1	66.7	68.9	68.4	68.6	67.2	66.5	66.8	66.0	63.1	
Products of petroleum and coal.....	156.6	155.2	154.4	154.2	154.9	154.1	154.5	153.7	150.5	152.9	150.7	158.2	160.4	155.4	157.6
Petroleum refining.....	116.5	116.3	116.4	117.1	116.4	116.4	114.9	113.5	117.1	117.1	120.4	122.3	118.4	121.3	
Coke, other petroleum and coal products.....	38.7	38.1	37.8	37.8	37.7	38.1	38.8	35.0	34.8	36.0	37.8	38.1	37.0	33.8	
Rubber products.....	199.2	198.5	200.7	207.5	208.6	208.0	208.0	209.1	212.3	212.4	203.8	203.4	196.1	199.4	196.0
Tires and inner tubes.....	77.6	78.1	78.8	77.4	77.9	78.1	79.0	79.7	80.5	78.4	79.7	79.7	74.6	74.7	
Rubber footwear.....	18.1	18.5	18.9	19.0	19.0	19.4	19.6	19.1	19.0	18.4	18.3	18.2	17.9	16.7	
Other rubber products.....	102.8	104.1	109.8	112.2	111.1	110.5	110.5	113.5	112.9	107.0	105.4	107.2	106.9	94.6	
Leather and leather products.....	322.8	315.5	316.9	328.1	328.8	329.0	331.5	331.0	331.0	335.4	339.3	334.6	333.9	331.6	317.7
Leather: tanned, curried, and finished.....	29.7	29.8	30.1	30.5	31.3	31.5	31.7	31.9	32.6	32.8	32.4	33.1	32.8	33.7	
Industrial leather belting and packing.....	3.1	3.3	3.7	3.9	3.9	3.8	3.9	4.0	4.0	4.0	4.0	4.0	4.0	3.8	3.1
Boot and shoe cut stock and findings.....	16.6	16.8	17.5	17.9	18.1	17.4	17.4	16.9	16.9	17.5	17.6	17.9	17.4	16.2	
Footwear (except rubber).....	212.7	213.7	220.6	221.7	223.6	224.0	229.4	229.2	229.2	228.5	227.8	227.0	223.7	213.8	
Luggage.....	13.4	13.3	13.3	12.8	12.6	12.8	13.2	14.0	13.8	13.4	13.4	13.2	13.0	12.8	
Handbags and small leather goods.....	26.0	26.5	29.2	29.1	27.7	28.3	29.5	30.1	29.3	28.3	26.3	25.0	27.3	26.1	
Gloves and miscellaneous leather goods.....	14.0	13.7	13.7	12.9	11.8	13.7	14.9	14.9	15.1	14.8	13.9	13.9	13.6	13.8	

See footnotes at end of table.

TABLE A-3. Production or nonsupervisory workers in nonagricultural establishments, by industry<sup>1</sup>—Continued

	[In thousands]														
Industry	1960						1959						Annual average		
	June <sup>1</sup>	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
Transportation and public utilities:															
Other public utilities.....	530	530	524	530	530	532	533	534	541	547	544	533	534	537	
Gas and electric utilities.....	509.3	508.9	503.7	509.4	509.9	511.3	512.8	513.5	520.1	525.3	522.6	512.0	513.0	516.4	
Electric light and power utilities.....	218.6	218.9	219.1	219.3	219.8	220.3	220.8	221.1	224.3	228.9	226.2	224.7	221.8	223.2	
Gas utilities.....	137.0	137.6	137.6	137.8	137.6	137.9	138.2	138.2	139.7	140.9	140.7	136.3	138.0	137.5	
Electric light and gas utilities combined.....	153.7	152.4	147.0	152.3	152.5	153.1	153.8	154.2	158.1	157.5	155.7	148.0	153.2	155.7	
Local utilities, not elsewhere classified.....	20.9	20.9	20.6	20.3	20.2	20.4	20.5	20.7	21.0	21.4	21.3	21.0	20.6	20.4	
Wholesale and retail trade:															
Wholesale trade.....	2,670	2,679	2,671	2,674	2,674	2,721	2,709	2,694	2,671	2,655	2,646	2,637	2,651	2,622	
Wholesalers, full-service and limited-function.....	1,606.4	1,612.6	1,604.9	1,607.9	1,608.5	1,643.0	1,633.1	1,623.4	1,612.9	1,601.8	1,589.4	1,584.4	1,588.8	1,586.7	
Automotive.....	120.8	120.5	120.0	120.1	119.9	121.3	120.9	120.8	120.6	121.1	119.6	118.1	117.5	110.0	
Groceries, food specialties, beer, wines, and liquors.....	278.0	279.8	282.2	281.0	282.0	287.2	287.2	280.1	277.9	272.6	273.1	274.1	276.9	272.2	
Electrical goods, machinery, hardware, and plumbing equipment.....	302.2	302.6	302.2	302.0	301.2	304.8	304.6	304.5	302.2	303.4	301.4	300.0	308.1	302.1	
Other full-service and limited-function wholesalers.....	815.4	819.7	810.5	814.8	814.5	839.7	830.4	828.0	822.2	814.7	805.3	803.2	806.3	772.4	
Wholesale distributors, other.....	1,063.4	1,066.7	1,066.0	1,066.5	1,065.8	1,078.1	1,075.9	1,070.8	1,058.1	1,082.7	1,066.1	1,052.1	1,061.8	1,084.9	
Retail trade:															
General merchandise stores.....	1,359.3	1,407.7	1,301.6	1,209.7	1,302.4	1,919.3	1,525.8	1,419.1	1,363.3	1,307.9	1,301.5	1,326.4	1,383.6	1,334.7	
Department stores and general mail-order houses.....	857.3	872.0	820.7	826.4	871.0	1,219.3	981.1	904.4	859.3	833.9	830.4	844.7	828.6	855.9	
Other general merchandise stores.....	502.0	535.7	480.9	473.3	491.4	700.0	544.7	514.7	504.0	474.0	471.1	481.7	501.0	478.8	
Food and liquor stores.....	1,512.3	1,512.6	1,499.9	1,500.3	1,496.4	1,532.9	1,516.0	1,498.1	1,494.8	1,477.8	1,468.4	1,486.9	1,485.3	1,483.2	
Grocery, meat, and vegetable markets.....	1,128.0	1,127.8	1,128.1	1,123.9	1,125.1	1,145.3	1,136.8	1,118.4	1,099.4	1,099.8	1,080.8	1,100.7	1,102.0	1,078.7	
Dairy-product stores and dealers.....	188.8	185.8	173.0	181.2	181.4	184.7	184.0	184.9	194.9	198.5	199.5	196.9	190.1	196.5	
Other food and liquor stores.....	195.5	199.0	190.2	195.2	189.9	203.5	195.2	194.8	190.5	189.2	188.1	192.3	193.2	206.0	
Automotive and accessories dealers.....	722.3	720.0	705.9	705.1	704.3	720.5	708.8	709.0	706.8	709.0	708.6	705.3	699.8	677.2	
Apparel and accessories stores.....	509.6	623.8	530.1	530.2	556.4	692.0	583.1	569.3	552.1	517.3	521.0	540.5	554.7	542.0	
Other retail trade (except eating and drinking places).....	2,095.0	2,096.5	2,064.5	2,068.7	2,063.8	2,196.9	2,131.1	2,113.9	2,129.0	2,124.8	2,116.9	2,090.6	2,090.3	2,066.7	
Furniture and appliance stores.....	359.8	358.4	356.7	358.6	359.5	379.0	367.8	361.4	358.4	363.6	352.1	351.0	356.5	354.3	
Drug stores.....	372.0	375.4	363.1	361.8	368.4	393.3	369.1	365.0	368.7	364.8	363.3	355.3	357.7	337.0	

<sup>1</sup> For comparability of data with those published in issues prior to August 1958 and coverage of the series, see footnote 1, table A-2.

Production and related workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, ware-

housing, shipping, maintenance, repair, janitorial, watchman services product development, auxiliary production for plant's own use (e.g., power-plant), and recordkeeping and other services closely associated with the aforementioned production operations.

<sup>2</sup> Preliminary.



TABLE A-4. Unemployment insurance and employment service programs, selected operations <sup>1</sup>

[All items except average benefit amounts are in thousands]

Item	1960					1960							
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May
<b>Employment service: <sup>2</sup></b>													
New applications for work.....	811	762	836	828	875	707	823	762	744	686	766	913	711
Nonfarm placements.....	534	511	450	412	418	432	465	556	633	570	664	581	555
<b>State unemployment insurance programs:</b>													
Initial claims <sup>3</sup> .....	1,162	1,232	1,387	1,265	1,621	1,645	1,501	1,197	986	1,011	1,228	973	880
Insured unemployment <sup>4</sup> (average weekly volume).....	1,682	1,909	2,209	2,157	2,180	1,841	1,677	1,309	1,203	1,291	1,333	1,268	1,464
Rate of insured unemployment <sup>5</sup> .....	4.3	4.9	5.7	5.5	5.6	4.8	4.4	3.4	3.1	3.4	3.5	3.4	3.8
Weeks of unemployment compensated <sup>6</sup> .....	6,570	7,527	9,114	7,903	7,621	7,108	5,398	4,630	4,826	4,627	5,061	5,202	5,838
Average weekly benefit amount for total unemployment <sup>7</sup> .....	\$32.24	\$32.50	\$32.39	\$32.26	\$31.90	\$31.91	\$32.21	\$30.81	\$30.49	\$29.76	\$29.10	\$29.23	\$29.45
Total benefits paid.....	\$204,853	\$237,391	\$287,142	\$247,635	\$235,202	\$219,466	\$168,344	\$136,856	\$141,800	\$133,444	\$142,503	\$142,919	\$162,011
<b>Unemployment compensation for ex-service- men: <sup>8</sup></b>													
Initial claims <sup>3</sup> .....	22	23	29	27	31	31	28	27	24	28	27	23	19
Insured unemployment <sup>4</sup> (average weekly volume).....	45	54	61	61	61	53	48	41	40	44	43	43	52
Weeks of unemployment compensated.....	197	230	272	247	241	229	175	100	174	176	181	188	222
Total benefits paid.....	\$6,004	\$7,032	\$8,345	\$7,570	\$7,427	\$6,966	\$5,297	\$4,825	\$5,267	\$5,338	\$5,340	\$5,554	\$6,533
<b>Unemployment compensation for Federal civilian employees: <sup>9</sup></b>													
Initial claims <sup>3</sup> .....	12	11	12	13	17	14	14	13	12	11	15	12	10
Insured unemployment <sup>4</sup> (average weekly volume).....	30	33	38	39	38	33	31	28	27	26	28	26	30
Weeks of unemployment compensated.....	126	144	173	159	146	144	117	112	117	114	115	121	126
Total benefits paid.....	\$4,205	\$4,799	\$5,730	\$5,265	\$4,820	\$4,713	\$3,815	\$3,568	\$3,665	\$3,602	\$3,578	\$3,801	\$3,921
<b>Railroad unemployment insurance:</b>													
Applications <sup>10</sup> .....	5	6	59	6	12	15	21	22	23	33	87	8	4
Insured unemployment (average weekly volume).....	45	54	63	69	78	105	93	97	94	79	63	35	39
Number of payments <sup>11</sup> .....	104	133	164	159	184	190	201	223	194	174	95	88	96
Average amount of benefit payment <sup>12</sup> .....	\$72.19	\$74.56	\$77.35	\$79.10	\$80.57	\$80.82	\$80.61	\$83.50	\$84.31	\$83.16	\$75.22	\$72.13	\$62.35
Total benefits paid <sup>13</sup> .....	\$7,909	\$10,414	\$13,374	\$12,754	\$16,582	\$16,206	\$21,663	\$23,810	\$26,078	\$27,314	\$18,918	\$21,202	\$8,641
<b>All programs: <sup>14</sup></b>													
Insured unemployment <sup>4</sup> .....	1,801	2,078	2,370	2,326	2,359	2,008	1,833	1,479	1,370	1,451	1,477	1,414	1,569

<sup>1</sup> Data relate to the United States (including Alaska and Hawaii), except where otherwise indicated.<sup>2</sup> Includes Guam, Puerto Rico, and the Virgin Islands.<sup>3</sup> Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transitional claims.<sup>4</sup> Includes Puerto Rico and the Virgin Islands.<sup>5</sup> Number of workers reporting the completion of at least 1 week of unemployment.<sup>6</sup> The rate is the number of insured unemployed expressed as a percent of the average covered employment in a 12-month period.<sup>7</sup> Includes data for the Federal civilian employee program through June 1959.<sup>8</sup> Includes data for the Federal civilian employee program for the period October 1958-June 1959.<sup>9</sup> Excludes data on claims and payments made jointly with other programs.<sup>10</sup> Excludes data on claims and payments made jointly with State programs.<sup>11</sup> An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year.<sup>12</sup> Payments are for unemployment in 14-day registration periods.<sup>13</sup> The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.<sup>14</sup> Adjusted for recovery of overpayments and settlement of underpayments.<sup>15</sup> Represents an unduplicated count of insured unemployment under the State, Ex-servicemen and UCFE programs, the Railroad Unemployment Insurance Act, and the Veterans' Readjustment Assistance Act of 1952 (not presented separately in table), which terminated January 31, 1960.

Source: U.S. Department of Labor, Bureau of Employment Security for all items except railroad unemployment insurance, which is prepared by the U.S. Railroad Retirement Board.

## B.—Labor Turnover

TABLE B-1. Labor turnover rates, by major industry group <sup>1</sup>

(Per 100 employees)

Major industry group	1960					1959										Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
	Accessions: Total <sup>2</sup>																
Manufacturing.....	3.1	2.8	2.7	2.9	3.6	3.8	3.0	3.1	3.9	3.9	3.3	4.4	3.6	3.6	3.0		
Durable goods.....	3.1	2.8	2.7	2.9	3.8	4.7	3.2	3.1	4.1	4.1	3.3	4.5	3.7	3.8	3.3		
Ordinance and accessories.....	2.0	1.9	2.1	2.2	2.4	2.2	2.8	2.7	2.9	3.0	2.6	4.0	2.8	2.8	2.8		
Lumber and wood products.....	6.2	5.6	3.7	3.5	3.6	2.4	3.1	3.6	4.5	4.6	5.0	7.4	3.2	4.7	4.1		
Furniture and fixtures.....	3.8	3.5	3.3	3.3	3.9	2.9	3.0	3.8	4.8	5.3	4.5	4.8	4.1	4.0	3.4		
Stone, clay, and glass products.....	2.5	2.8	2.3	2.5	2.6	1.9	2.8	2.5	2.7	3.3	2.9	4.8	3.1	3.1	2.9		
Primary metal industries.....	1.8	1.6	1.7	2.2	2.7	2.7	2.2	2.2	2.8	2.4	1.8	2.8	2.7	2.9	2.8		
Fabricated metal products.....	3.8	3.2	3.0	3.6	5.0	4.3	5.8	3.2	4.6	5.7	3.6	4.8	3.9	4.4	3.6		
Machinery (except electrical).....	2.3	1.9	2.3	2.6	3.3	3.1	2.7	2.4	3.1	3.0	2.8	4.2	3.3	3.2	2.8		
Electrical machinery.....	2.6	2.1	2.5	2.7	3.1	2.9	3.1	3.3	4.6	4.2	3.4	4.5	3.5	3.6	2.8		
Transportation equipment.....	3.4	3.1	3.1	3.3	5.2	11.8	3.3	3.6	4.8	4.4	3.5	4.5	3.5	4.5	4.0		
Instruments and related products.....	2.0	1.8	1.7	2.2	1.9	1.4	2.2	2.5	3.1	2.8	2.1	3.7	2.5	2.5	1.8		
Miscellaneous manufacturing.....	4.6	4.8	5.1	4.2	5.8	2.6	2.8	4.7	6.3	6.8	5.4	5.2	4.5	4.8	4.0		
Nondurable goods <sup>4</sup> .....	3.2	2.8	2.6	2.8	3.1	2.1	2.6	2.9	3.5	3.6	3.4	4.3	3.4	3.1	2.7		
Food and kindred products.....	4.2	4.4	3.1	3.3	3.9	2.7	3.8	3.9	4.5	4.3	4.2	5.5	4.7	4.1	3.5		
Tobacco manufactures.....	2.5	1.3	1.4	1.4	1.4	1.6	1.1	1.9	2.5	2.2	3.7	2.1	1.6	1.8	1.6		
Textile-mill products.....	3.3	2.8	3.1	3.0	3.2	2.1	2.5	3.0	3.5	3.9	3.6	4.0	3.2	3.2	3.0		
Apparel and other finished textile products.....	4.1	3.4	3.4	4.0	4.4	2.2	3.1	4.1	5.0	5.6	5.0	4.6	4.7	4.2	3.4		
Paper and allied products.....	2.4	2.2	2.1	2.2	2.3	1.7	1.8	2.2	3.0	2.9	2.8	4.3	2.8	2.6	2.1		
Chemicals and allied products.....	1.6	1.4	1.6	1.7	1.6	1.2	1.3	1.6	1.8	1.9	1.9	3.3	2.0	1.8	1.3		
Products of petroleum and coal.....	1.4	.7	.8	.6	.6	.4	.8	.7	1.0	.8	.8	1.9	1.0	1.0	.7		
Rubber products.....	2.6	1.7	1.5	2.3	2.7	2.0	1.8	2.4	3.2	3.3	2.4	3.7	3.0	2.7	2.6		
Leather and leather products.....	5.0	3.0	3.1	3.3	4.2	3.6	4.7	3.5	4.9	4.0	4.5	5.0	4.2	4.1	3.3		
Nonmanufacturing:																	
Metal mining.....	3.5	6.0	3.9	2.4	3.6	2.9	2.1	2.7	1.8	2.3	2.3	3.4	2.9	2.7	2.6		
Anthracite mining.....	1.0	1.1	1.0	.7	1.8	.9	1.8	2.4	2.1	.5	1.5	1.0	1.9	1.6	1.6		
Bituminous coal mining.....	1.2	1.2	.9	1.3	1.7	4.1	8.8	1.5	2.1	2.0	1.4	.9	1.7	2.3	1.2		
Accessions: New hires																	
Manufacturing.....	1.7	1.4	1.5	1.7	1.9	1.3	1.5	2.0	2.6	2.8	2.2	3.0	2.2	2.0	1.3		
Durable goods.....	1.6	1.4	1.4	1.7	1.9	1.3	1.4	2.0	2.6	2.8	2.2	3.0	2.2	2.0	1.3		
Ordinance and accessories.....	1.3	1.2	1.5	1.6	1.5	1.5	2.1	2.1	2.2	2.3	2.1	3.0	1.4	1.9	1.7		
Lumber and wood products.....	4.9	3.7	2.6	2.4	2.3	1.7	2.3	2.9	4.1	4.1	4.4	6.2	6.3	3.7	2.7		
Furniture and fixtures.....	2.6	2.1	2.3	2.2	2.4	1.5	2.0	3.0	4.0	4.3	3.8	3.4	2.6	2.8	1.7		
Stone, clay, and glass products.....	1.4	1.2	1.2	1.3	1.2	.8	1.0	2.0	1.8	2.2	2.0	3.3	2.1	1.8	.9		
Primary metal industries.....	.5	.6	.8	1.2	1.4	1.0	.9	1.2	1.6	1.5	1.0	1.9	1.8	1.5	.5		
Fabricated metal products.....	1.9	1.4	1.5	2.0	2.4	1.8	1.4	1.8	2.7	2.9	2.2	3.0	2.2	2.1	1.4		
Machinery (except electrical).....	1.2	1.1	1.4	1.6	1.8	1.1	1.3	1.6	2.0	2.0	1.8	2.8	2.1	1.8	.9		
Electrical machinery.....	1.1	1.0	1.4	1.7	1.8	1.4	1.8	2.5	3.3	3.0	2.3	3.0	2.0	2.2	1.4		
Transportation equipment.....	1.2	1.1	.9	1.6	2.0	1.5	.9	1.6	1.8	1.4	1.6	2.2	1.4	1.5	1.3		
Instruments and related products.....	1.4	1.4	1.2	1.6	1.3	1.1	1.5	2.0	2.6	2.1	1.8	3.2	2.0	1.9	.9		
Miscellaneous manufacturing.....	2.6	2.3	2.5	2.5	2.8	1.4	1.9	3.5	4.9	5.2	3.8	3.6	2.7	3.0	1.9		
Nondurable goods <sup>4</sup> .....	1.9	1.6	1.5	1.7	1.7	1.2	1.5	2.0	2.5	2.6	2.4	3.0	2.1	2.0	1.3		
Food and kindred products.....	2.0	1.7	1.4	1.5	1.6	1.1	1.9	2.3	2.6	2.5	2.4	3.1	2.3	2.0	1.5		
Tobacco manufactures.....	1.3	.6	.5	.7	.7	.3	.7	1.2	1.8	1.3	1.8	1.3	.9	1.1	.8		
Textile-mill products.....	2.0	1.7	1.7	1.8	1.7	1.2	1.5	2.0	2.6	2.8	2.7	2.7	2.2	2.1	1.5		
Apparel and other finished textile products.....	2.7	2.6	2.6	2.7	2.9	1.5	2.3	3.0	3.9	4.3	3.7	3.2	2.9	3.0	1.8		
Paper and allied products.....	1.7	1.5	1.3	1.5	1.5	1.0	1.3	1.8	2.4	2.3	2.1	3.4	2.1	1.9	1.3		
Chemicals and allied products.....	1.0	1.0	1.1	1.2	1.0	.7	.9	1.3	1.4	1.5	1.5	2.6	1.1	1.3	.3		
Products of petroleum and coal.....	.8	.5	.4	.3	.2	.2	.3	.6	.7	.6	.7	1.4	.7	.6	.3		
Rubber products.....	.7	.5	.6	1.3	1.6	.9	1.0	1.7	2.5	2.3	1.8	2.5	1.5	1.7	.8		
Leather and leather products.....	3.1	1.6	1.6	1.7	2.5	1.9	2.0	2.1	2.6	2.8	3.4	4.1	2.6	2.6	1.7		
Nonmanufacturing:																	
Metal mining.....	2.6	2.4	1.7	1.1	1.6	1.1	1.1	1.5	1.3	1.7	1.3	1.9	1.4	1.4	.7		
Anthracite mining.....	.1	.1	.2	.2	.3	.5	1.2	1.0	.1	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	.1	.3	.4		
Bituminous coal mining.....	.6	.4	.3	.8	.4	.3	.8	.6	.5	.6	.4	.2	.4	.4			

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group<sup>1</sup>—Continued

[Per 100 employees]

Major industry group	1960					1959									Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958	
	Separations: Total <sup>2</sup>															
Manufacturing.....	3.3	3.6	3.7	3.0	2.9	3.1	4.1	4.7	4.3	3.7	3.3	2.8	2.9	3.4	3.6	
Durable goods.....	3.5	3.9	4.1	3.1	2.8	3.1	4.5	5.3	4.4	3.9	3.5	3.0	2.9	3.5	3.9	
Ordinance and accessories.....	2.4	3.1	2.2	1.7	2.1	1.4	1.7	2.3	3.3	2.2	1.8	2.3	2.3	2.3	2.9	
Lumber and wood products.....	3.6	4.9	5.3	3.4	3.9	4.6	5.1	5.0	5.9	6.0	4.9	2.8	4.2	4.6	4.3	
Furniture and fixtures.....	3.3	4.2	3.6	3.8	3.9	3.1	3.5	4.8	5.5	4.3	4.0	3.3	3.4	3.7	3.7	
Stone, clay, and glass products.....	2.8	3.1	3.6	2.6	2.8	2.9	2.7	3.4	4.5	3.4	3.1	2.4	2.1	2.8	3.5	
Primary metal industries.....	4.6	3.6	3.5	2.2	1.8	2.0	2.5	3.3	3.5	2.5	2.2	2.1	1.8	2.3	3.3	
Fabricated metal products.....	3.2	4.4	5.1	3.9	3.1	3.0	5.6	9.1	4.8	4.4	4.2	3.7	3.3	4.3	4.3	
Machinery (except electrical).....	3.1	3.2	2.9	2.4	2.2	2.2	3.0	3.7	3.7	2.7	2.7	2.4	2.5	2.7	3.3	
Electrical machinery.....	3.3	3.7	4.0	3.1	3.0	2.7	2.8	3.4	3.7	2.8	2.7	2.5	2.7	2.8	3.1	
Transportation equipment.....	3.9	4.8	5.4	3.9	3.0	3.8	9.5	8.9	5.0	6.0	5.9	3.8	3.8	5.2	5.1	
Instruments and related products.....	2.3	2.1	1.9	2.1	1.8	2.0	2.1	2.9	3.1	2.3	1.7	2.4	1.8	2.1	2.4	
Miscellaneous manufacturing.....	3.4	4.9	4.3	3.9	4.3	7.9	6.6	5.1	5.6	4.3	3.8	3.3	4.2	4.7	4.7	
Nondurable goods <sup>4</sup> .....	2.9	3.1	3.0	2.8	3.0	2.9	3.2	3.5	4.1	3.4	2.9	2.6	2.8	3.0	3.0	
Food and kindred products.....	3.3	3.6	4.1	3.8	4.1	4.1	4.4	4.9	5.3	4.0	3.5	3.3	3.3	4.0	3.8	
Tobacco manufactures.....	1.5	1.7	2.0	1.9	2.7	1.9	1.3	1.7	2.1	1.9	2.7	1.6	2.0	1.9	2.1	
Textile-mill products.....	2.9	3.5	2.9	3.0	3.1	3.3	3.3	4.0	4.1	3.7	3.2	2.8	3.5	3.3	3.4	
Apparel and other finished textile products.....	3.8	4.0	3.6	3.3	4.0	3.3	3.8	4.0	4.8	4.6	4.0	3.3	3.7	3.8	3.8	
Paper and allied products.....	2.4	2.2	2.4	2.3	2.6	2.4	2.6	2.8	4.1	3.2	2.4	2.4	2.2	2.6	2.4	
Chemicals and allied products.....	1.4	1.5	1.4	1.2	1.6	1.5	1.6	1.7	2.7	1.8	1.3	1.3	1.4	1.6	1.8	
Products of petroleum and coal.....	.9	1.1	.9	.7	1.0	1.0	1.3	1.1	1.7	1.1	1.3	1.0	.8	1.1	1.3	
Rubber products.....	3.0	3.8	4.1	2.8	2.4	2.7	3.6	2.7	3.0	2.8	2.3	2.2	2.4	2.5	2.7	
Leather and leather products.....	4.7	4.6	4.8	4.2	3.7	3.3	3.8	5.2	5.2	4.7	3.9	3.6	3.6	3.9	3.7	
Nonmanufacturing.....																
Metal mining.....	2.4	2.6	3.1	1.7	2.2	2.2	2.2	1.8	4.3	2.7	2.6	2.7	2.8	2.6	3.9	
Anthracite mining.....	1.8	3.2	1.1	1.3	2.2	.7	2.3	1.3	1.7	1.7	8.7	3.2	4.4	2.9	4.3	
Bituminous coal mining.....	3.2	3.8	1.9	1.3	1.5	1.7	2.1	1.4	1.8	19.6	4.0	2.2	2.5	3.6	2.5	
Separations: Quits																
Manufacturing.....	1.1	1.1	1.0	1.0	1.0	0.9	1.0	1.4	2.2	1.8	1.3	1.3	1.3	1.3	0.9	
Durable goods.....	1.0	1.0	.9	.9	.9	.8	.9	1.3	2.1	1.6	1.2	1.2	1.2	1.2	.8	
Ordinance and accessories.....	.8	1.0	.8	.8	.9	.7	.7	1.0	1.9	1.4	1.1	1.0	1.0	1.1	.8	
Lumber and wood products.....	2.0	2.3	1.8	1.5	1.4	1.4	1.8	2.4	4.3	3.6	2.7	2.8	2.6	2.3	1.7	
Furniture and fixtures.....	1.7	1.9	1.4	1.4	1.5	1.0	1.3	2.0	2.9	2.8	1.9	1.8	1.7	1.7	1.1	
Stone, clay, and glass products.....	.8	.7	.7	.7	.7	.5	.7	1.0	1.4	1.6	1.0	1.0	1.0	.9	.7	
Primary metal industries.....	.5	.5	.5	.5	.6	.7	.8	.7	1.3	1.0	.7	.8	.7	.7	.4	
Fabricated metal products.....	1.0	1.0	.9	.9	1.0	.7	.8	1.1	1.9	1.6	1.1	1.2	1.1	1.1	.8	
Machinery (except electrical).....	.8	.9	.8	.7	.7	.6	.7	.9	1.6	1.2	.9	1.0	1.0	.9	.6	
Electrical machinery.....	1.0	1.0	1.1	1.0	1.1	1.0	1.1	1.4	2.3	1.7	1.2	1.2	1.2	1.3	.9	
Transportation equipment.....	.8	.8	.7	.8	.8	.7	.7	1.0	1.5	1.1	1.0	1.1	1.0	1.0	.8	
Instruments and related products.....	1.0	.9	.8	.9	.8	.7	.8	1.4	2.0	1.4	.9	1.1	.9	1.0	.7	
Miscellaneous manufacturing.....	1.4	1.6	1.5	1.4	1.5	1.1	1.5	2.4	3.5	2.6	1.9	1.6	1.7	1.8	1.2	
Nondurable goods <sup>4</sup> .....	1.3	1.3	1.2	1.1	1.2	1.0	1.2	1.5	2.5	2.1	1.6	1.4	1.4	1.4	1.0	
Food and kindred products.....	1.0	1.0	.9	1.0	1.0	.8	1.0	1.4	2.3	1.8	1.2	1.2	1.1	1.2	.9	
Tobacco manufactures.....	.9	.9	.8	.9	1.2	.7	.8	1.2	1.5	1.4	1.6	1.1	1.1	1.1	.9	
Textile-mill products.....	1.6	1.7	1.4	1.3	1.4	1.1	1.4	1.8	2.6	2.4	1.9	1.6	1.6	1.6	1.2	
Apparel and other finished textile products.....	2.6	2.4	2.3	2.2	2.3	1.8	2.2	2.8	3.6	3.5	2.9	2.3	2.3	2.5	1.7	
Paper and allied products.....	.9	.9	.8	.8	.9	.7	.9	1.2	2.7	1.8	1.1	1.2	1.1	1.2	.8	
Chemicals and allied products.....	.5	.6	.5	.5	.6	.4	.5	.7	1.7	1.0	.7	.7	.8	.7	.5	
Products of petroleum and coal.....	.3	.3	.3	.2	.3	.2	.3	.4	1.0	.8	.8	.8	.3	.4	.3	
Rubber products.....	.7	.7	.7	.8	.8	.7	.7	1.0	1.6	1.3	.9	1.1	1.0	.9	.6	
Leather and leather products.....	2.4	1.9	1.6	1.7	1.8	1.4	1.7	2.0	3.0	3.1	2.6	2.5	2.1	2.1	1.5	
Nonmanufacturing.....																
Metal mining.....	1.5	1.7	2.1	.9	.9	1.0	.9	1.0	2.2	1.4	1.7	1.2	2.1	1.4	1.2	
Anthracite mining.....	.7	.3	.3	.2	( <sup>5</sup> )	.2	.2	.4	.5	.6	.1	.5	.4	.3	.5	
Bituminous coal mining.....	.3	.3	.2	.2	.3	.3	.4	.5	.6	.4	.3	.2	.3	.3	.3	

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group<sup>1</sup>—Continued

[Per 100 employees]

Major industry group	1960					1959										Annual average	
	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
	Separations: Layoffs																
Manufacturing.....	1.6	2.0	2.2	1.5	1.3	1.7	2.6	2.8	1.5	1.4	1.4	1.0	1.1	1.6	2.3		
Durable goods.....	1.9	2.3	2.6	1.6	1.3	1.8	3.1	3.5	1.6	1.6	1.7	1.1	1.2	1.8	2.6		
Ordnance and accessories.....	1.2	1.7	1.0	.5	.7	.4	.7	.8	.6	.3	.3	.7	.7	.7	1.9		
Lumber and wood products.....	1.0	1.9	2.8	1.5	1.9	2.7	2.7	1.9	1.0	1.7	1.5	.7	.9	1.7	2.1		
Furniture and fixtures.....	1.0	1.7	1.7	1.9	1.9	1.6	1.7	2.1	1.8	1.0	1.4	1.1	1.2	1.4	2.2		
Stone, clay, and glass products.....	1.6	1.8	2.4	1.4	1.5	2.1	1.6	1.9	2.1	1.2	1.6	.7	.6	1.4	2.5		
Primary metal industries.....	3.6	2.5	2.4	1.2	.8	.9	1.3	2.1	1.6	.9	1.1	.7	.5	1.0	2.6		
Fabricated metal products.....	1.6	2.9	3.7	2.4	1.6	1.8	4.3	7.3	2.2	2.2	2.5	1.8	1.5	2.7	3.1		
Machinery (except electrical).....	1.8	1.8	1.6	1.1	1.0	1.1	1.9	2.2	1.5	.9	1.3	.9	1.0	1.2	2.4		
Electrical machinery.....	1.6	1.9	2.3	1.3	1.1	1.1	1.0	1.3	.6	.5	.9	.6	.8	.9	1.9		
Transportation equipment.....	2.4	3.4	4.0	2.4	1.7	2.5	8.2	7.3	2.6	4.1	3.3	2.1	2.1	3.6	3.8		
Instruments and related products.....	1.0	.8	.7	.8	.7	.9	.9	1.0	.6	.5	.8	.9	.6	.6	1.3		
Miscellaneous manufacturing.....	1.4	2.7	2.2	1.9	2.2	6.4	4.7	2.0	1.3	.9	1.2	1.1	1.9	2.3	3.1		
Nondurable goods <sup>4</sup> .....	1.1	1.4	1.4	1.2	1.3	1.6	1.6	1.5	1.1	.8	.9	.8	1.0	1.2	1.7		
Food and kindred products.....	1.9	2.1	2.7	2.3	2.6	3.0	3.0	3.0	2.4	1.7	1.8	1.7	1.9	2.4	2.5		
Tobacco manufactures.....	.4	.5	.8	.7	1.2	.9	.3	.1	.2	.2	.7	.2	.5	.5	.9		
Textile-mill products.....	.9	1.4	1.0	1.3	1.2	1.7	1.5	1.6	1.0	.8	.8	.7	1.4	1.2	1.8		
Apparel and other finished textile products.....	.9	1.1	.9	.7	1.2	1.1	1.1	.6	.8	.6	.6	.6	.8	.9	1.8		
Paper and allied products.....	.9	.8	1.0	1.0	1.2	1.2	1.2	1.1	.6	.8	.7	.7	.6	.9	1.3		
Chemicals and allied products.....	.5	.6	.5	.4	.6	.7	.8	.6	.5	.3	.3	.2	.3	.5	1.0		
Products of petroleum and coal.....	.3	.5	.3	.2	.5	.4	.7	.5	.3	.2	.6	.2	.2	.4	.6		
Rubber products.....	1.9	2.7	2.9	1.6	1.1	1.7	2.5	1.2	.9	.7	.9	.7	1.0	1.1	1.9		
Leather and leather products.....	2.0	2.1	2.6	1.7	1.2	1.3	1.4	2.6	1.5	.9	.7	.8	.9	1.2	1.8		
Nonmanufacturing.....																	
Metal mining.....	.1	.2	.5	.3	.7	.4	.9	.3	1.6	.8	.2	.7	.1	.6	2.2		
Anthracite mining.....	.4	1.8	.2	.6	.8	(9)	1.8	.3	.3	(7)	1.8	1.9	2.7	1.7	3.7		
Bituminous coal mining.....	2.6	3.1	1.4	.8	.9	1.1	1.8	.7	.8	18.9	3.3	1.8	2.0	3.1	2.0		

<sup>1</sup> Month-to-month changes in total employment in manufacturing and nonmanufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment series for the following reasons:

(1) The labor turnover series measures changes during the calendar month, while the employment series measures changes from midmonth to midmonth;

(2) Industry coverage is not identical, as the printing and publishing industry and some seasonal industries are excluded from turnover;

(3) Turnover rates tend to be understated because small firms are not as prominent in the turnover sample as in the employment sample; and

(4) Reports from plants affected by work stoppages are excluded from the

turnover series, but the employment series reflects the influence of such stoppages.

<sup>2</sup> Preliminary.

<sup>3</sup> Beginning with January 1959, transfers between establishments of the same firm are included in total accessions and total separations; therefore, rates for these items are not strictly comparable with prior data. Transfers comprise part of other accessions and other separations, the rates for which are not shown separately.

<sup>4</sup> Excludes the printing, publishing, and allied industries group, and the following industries: Canning and preserving; women's, misses', and children's outerwear; and fertilizer.

<sup>5</sup> Less than 0.05.



## C.—Earnings and Hours

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry

Industry	1960					1959										Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
Average weekly earnings																	
Mining.....	\$110.43	\$111.38	\$110.98	\$108.13	\$111.11	\$114.51	\$109.89	\$108.92	\$107.45	\$108.77	\$103.49	\$111.49	\$108.94	\$107.73	\$100.10		
Metal.....	113.58	113.58	111.30	107.71	113.05	111.41	108.84	99.38	99.29	97.71	93.14	107.79	106.86	103.21	96.22		
Iron.....	119.94	120.80	115.66	115.95	122.40	118.98	119.00	86.34	90.19	95.84	84.10	116.18	113.83	107.34	100.27		
Copper.....	116.33	114.66	114.66	108.94	111.87	110.32	105.64	110.53	99.46	96.75	100.85	106.60	106.03	106.17	94.82		
Lead and zinc.....	94.21	93.71	92.52	92.62	94.71	94.58	93.20	92.39	94.85	92.89	89.24	91.66	87.78	90.63	85.93		
Anthracite.....	82.01	80.88	99.91	76.16	88.09	94.73	98.84	82.80	88.36	76.73	70.20	82.75	86.48	84.98	76.01		
Bituminous coal.....	119.03	122.30	127.26	121.97	127.32	135.38	118.14	123.55	118.81	120.74	104.98	126.49	120.01	118.30	102.38		
Crude-petroleum and natural-gas production.....																	
Petroleum and natural-gas production (except contract services).....	116.03	115.18	113.52	112.12	116.72	113.81	117.83	113.12	116.72	115.75	117.81	112.66	112.84	114.90	109.75		
Nonmetallic mining and quarrying.....	98.55	98.55	92.80	91.46	92.38	96.13	95.90	97.90	99.01	100.33	98.32	98.08	95.28	95.48	80.63		
Contract construction.....	119.56	119.19	115.50	113.75	113.72	117.81	113.88	117.66	118.66	119.88	116.56	116.66	114.82	114.82	110.47		
Nonbuilding construction.....	118.03	117.96	116.91	111.16	108.00	113.47	110.87	117.74	112.58	121.29	118.80	117.46	112.06	113.24	109.47		
Highway and street construction.....	111.90	112.36	105.69	101.01	96.78	103.88	104.80	113.63	109.63	119.71	115.44	113.86	106.55	108.09	104.14		
Other nonbuilding construction.....	124.18	123.51	124.26	117.56	115.60	120.87	116.74	123.01	116.35	121.29	120.77	118.00	118.40	114.26			
Building construction.....	119.67	119.19	115.60	114.22	114.87	119.13	114.14	117.72	118.71	119.19	116.16	116.66	115.39	115.28	110.67		
General contractors.....	109.90	109.50	104.83	104.31	104.88	108.78	103.03	109.85	107.87	110.70	107.15	108.19	106.86	106.29	102.53		
Special-trade contractors.....	124.93	124.57	120.74	119.71	119.72	124.53	120.04	122.38	121.70	123.96	120.88	121.81	120.82	120.27	115.26		
Plumbing and heating.....	132.08	131.98	130.27	128.43	129.83	133.32	129.08	130.79	126.29	131.45	129.96	128.78	129.12	128.56	123.23		
Painting and decorating.....	116.93	115.58	113.91	110.22	111.89	115.87	113.86	115.17	116.47	117.00	114.98	114.52	112.60	113.40	107.95		
Electrical work.....	148.23	147.07	146.69	144.77	146.30	148.19	142.51	144.38	138.78	144.71	145.08	143.91	141.64	142.06	135.97		
Other special-trade contractors.....	119.70	118.99	112.83	112.53	111.54	118.27	113.23	116.49	117.51	118.70	114.37	116.28	115.31	113.80	109.31		
Average weekly hours																	
Mining.....	40.9	41.1	40.8	39.9	40.7	42.1	40.7	41.1	40.7	41.2	39.2	41.6	40.8	40.5	39.1		
Metal.....	42.7	42.7	42.0	40.8	42.5	42.2	41.7	40.4	40.2	39.4	36.1	41.3	41.1	40.2	38.8		
Iron.....	44.4	44.8	40.3	40.4	42.5	41.6	41.9	30.4	31.1	32.6	28.9	40.2	36.8	37.4	36.2		
Copper.....	44.4	44.1	44.1	40.6	43.7	45.4	44.2	45.3	41.2	35.7	40.5	42.3	42.7	42.3	39.5		
Lead and zinc.....	41.5	41.1	40.4	40.8	41.0	41.3	40.7	40.7	41.6	41.1	38.8	40.2	39.0	40.1	39.6		
Anthracite.....	29.5	29.2	36.2	27.2	31.8	34.2	34.0	30.0	31.9	27.9	-----	30.2	31.3	30.9	28.9		
Bituminous coal.....	36.4	37.4	38.8	37.3	38.7	40.9	35.8	37.9	35.2	36.7	32.5	38.5	36.7	36.4	33.9		
Crude-petroleum and natural-gas production.....																	
Petroleum and natural-gas production (except contract services).....	41.0	40.7	40.4	39.9	41.1	40.5	41.2	40.4	41.1	40.9	41.6	40.2	40.3	40.9	40.8		
Nonmetallic mining and quarrying.....	43.8	43.8	41.1	41.2	41.8	43.3	43.2	44.3	44.6	45.4	45.1	43.2	44.3	43.8	43.3		
Contract construction.....	36.9	36.9	35.0	35.0	35.1	36.7	35.7	37.0	36.6	38.3	37.6	38.0	37.4	36.8	36.7		
Nonbuilding construction.....	40.7	41.1	39.1	38.2	37.5	39.4	38.9	40.6	39.5	43.0	42.1	42.1	40.6	40.3	40.1		
Highway and street construction.....	41.6	42.4	39.0	38.7	37.5	39.2	39.4	41.1	40.6	44.5	43.4	43.3	41.3	41.1	41.0		
Other nonbuilding construction.....	39.8	40.1	38.2	37.8	37.5	39.5	38.4	40.2	38.4	41.3	40.7	40.8	40.0	39.6	40.4		
Building construction.....	35.8	35.9	34.2	34.3	34.6	36.1	34.8	36.0	35.8	36.9	36.8	36.8	36.4	35.8	35.7		
General contractors.....	35.7	35.9	33.6	34.2	34.5	35.9	34.3	35.9	35.6	36.9	36.2	36.8	36.3	35.7	35.6		
Special-trade contractors.....	35.9	35.9	34.4	34.4	34.6	36.2	35.1	36.1	35.9	36.5	36.3	36.8	36.5	35.9	35.8		
Plumbing and heating.....	37.8	37.6	36.8	36.8	37.2	38.2	37.2	37.8	36.5	38.1	38.0	38.1	38.2	37.7	37.8		
Painting and decorating.....	34.8	34.4	33.8	32.9	33.4	34.9	34.4	34.9	35.4	36.0	35.7	35.9	35.5	35.0	34.6		
Electrical work.....	38.5	38.3	38.1	37.8	38.4	39.1	37.8	38.5	37.0	38.9	39.0	39.0	38.7	38.4	38.3		
Other special-trade contractors.....	35.0	35.1	32.8	33.0	33.0	35.2	33.9	35.3	35.5	36.3	35.3	36.0	35.7	34.8	34.7		
Average hourly earnings																	
Mining.....	\$2.70	\$2.71	\$2.72	\$2.71	\$2.73	\$2.72	\$2.70	\$2.65	\$2.64	\$2.64	\$2.64	\$2.66	\$2.67	\$2.66	\$2.56		
Metal.....	2.66	2.66	2.65	2.64	2.66	2.64	2.61	2.46	2.47	2.48	2.58	2.61	2.60	2.57	2.48		
Iron.....	2.89	2.89	2.87	2.87	2.88	2.86	2.84	2.84	2.90	2.94	2.91	2.89	2.86	2.87	2.77		
Copper.....	2.62	2.60	2.60	2.56	2.56	2.43	2.39	2.44	2.42	2.50	2.49	2.52	2.53	2.51	2.42		
Lead and zinc.....	2.27	2.28	2.29	2.27	2.31	2.29	2.29	2.27	2.28	2.26	2.30	2.28	2.25	2.26	2.17		
Anthracite.....	2.78	2.77	2.76	2.80	2.77	2.77	2.76	2.76	2.77	2.78	-----	2.74	2.73	2.75	2.63		
Bituminous coal.....	3.27	3.27	3.28	3.27	3.29	3.31	3.30	3.26	3.29	3.29	3.23	3.26	3.27	3.25	3.02		
Crude-petroleum and natural-gas production.....																	
Petroleum and natural-gas production (except contract services).....	2.83	2.83	2.81	2.81	2.84	2.81	2.86	2.80	2.84	2.83	2.82	2.80	2.80	2.81	2.69		
Nonmetallic mining and quarrying.....	2.25	2.25	2.26	2.22	2.24	2.21	2.22	2.22	2.21	2.22	2.21	2.18	2.17	2.18	2.07		
Contract construction.....	3.24	3.23	3.30	3.25	3.24	3.21	3.19	3.18	3.16	3.13	3.10	3.07	3.07	3.12	3.01		
Nonbuilding construction.....	2.90	2.87	2.99	2.91	2.88	2.88	2.85	2.90	2.85	2.82	2.81	2.79	2.78	2.81	2.73		
Highway and street construction.....	2.69	2.65	2.71	2.61	2.68	2.65	2.66	2.75	2.70	2.69	2.66	2.63	2.58	2.63	2.54		
Other nonbuilding construction.....	3.12	3.08	3.17	3.11	3.08	3.06	3.04	3.06	3.03	2.98	2.98	2.96	2.95	2.99	2.90		
Building construction.....	3.34	3.32	3.38	3.33	3.32	3.30	3.28	3.27	3.26	3.23	3.20	3.17	3.17	3.22	3.10		
General contractors.....	3.08	3.05	3.12	3.05	3.04	3.03	3.03	3.06	3.03	3.00	2.96	2.94	2.93	2.98	2.88		
Special-trade contractors.....	3.48	3.47	3.51	3.48	3.46	3.44	3.42	3.39	3.39	3.36	3.33	3.31	3.31	3.35	3.22		
Plumbing and heating.....	3.51	3.51	3.54	3.49	3.49	3.49	3.47	3.45	3.45	3.45	3.42	3.38	3.38	3.41	3.26		
Painting and decorating.....	3.36	3.36	3.37	3.35	3.35	3.32	3.31	3.30	3.29	3.25	3.22	3.19	3.20	3.24	3.12		
Electrical work.....	3.85	3.84	3.85	3.83	3.81	3.79	3.77	3.75	3.75	3.72	3.72	3.69	3.68	3.70	3.58		
Other special-trade contractors.....	3.42	3.39	3.44	3.41	3.38	3.36	3.34	3.30	3.31	3.27	3.24	3.23	3.23	3.27	3.18		

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959								Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958
Average weekly earnings															
<b>Manufacturing</b> .....	\$91.37	\$89.60	\$90.91	\$91.14	\$92.29	\$92.16	\$88.98	\$89.06	\$86.47	\$88.70	\$89.65	\$91.17	\$90.32	\$89.24	\$83.50
Durable goods.....	98.58	97.36	98.74	98.98	100.86	99.87	95.44	96.52	96.70	95.88	96.80	96.36	98.64	97.10	90.08
Nondurable goods.....	81.35	79.52	79.93	79.95	80.77	81.19	80.39	79.79	80.79	80.20	80.00	79.60	79.40	79.00	75.27
<i>Durable goods</i>															
Ordnance and accessories.....	107.79	106.49	108.73	107.68	108.21	109.10	106.97	106.55	105.22	103.38	103.06	108.47	105.83	104.08	101.43
Lumber and wood products.....	82.21	80.20	77.60	78.01	77.03	80.40	80.80	82.42	82.62	82.61	80.19	82.19	80.56	77.74	75.41
Sawmills and planing mills.....	79.52	77.95	75.27	75.25	75.83	78.14	78.18	79.37	79.77	80.95	79.13	80.70	78.66	78.85	73.23
Millwork, plywood, and prefabricated structural wood products.....	84.42	82.97	81.95	81.95	82.58	83.42	83.82	84.86	83.43	86.11	83.85	85.90	86.11	83.43	79.38
Wooden containers.....	62.21	60.70	59.10	59.25	59.50	60.09	59.35	61.35	62.06	61.24	60.53	61.12	60.59	59.09	56.88
Miscellaneous wood products.....	69.12	68.04	68.38	66.99	67.32	67.32	67.08	67.40	68.42	67.07	66.74	66.74	66.74	66.08	63.52
Furniture and fixtures.....	74.19	73.82	72.73	74.56	74.56	77.33	75.21	76.49	75.58	76.31	74.66	74.66	72.76	73.12	70.31
Household furniture.....	69.65	69.83	67.94	70.35	70.35	73.92	72.21	73.85	72.04	72.56	71.34	70.64	69.37	69.83	66.76
Office, public-building, and professional furniture.....	87.54	86.88	87.74	86.92	87.97	88.83	82.99	86.11	86.11	86.25	87.57	85.90	84.24	82.61	76.79
Partitions, shelving, lockers, and fixtures.....	95.00	92.10	93.26	92.80	93.73	96.05	94.66	91.94	93.89	94.35	87.71	95.91	90.72	88.03	85.97
Screens, blinds, and miscellaneous furniture and fixtures.....	75.98	72.91	74.80	75.22	74.82	75.33	73.23	74.93	71.83	73.44	74.48	73.81	76.22	73.53	71.56
Average weekly hours															
<b>Manufacturing</b> .....	39.9	39.3	39.7	39.8	40.3	40.6	39.9	40.3	40.3	40.5	40.2	40.7	40.5	40.2	36.2
Durable goods.....	40.4	39.9	40.3	40.4	41.0	41.1	40.1	40.9	40.8	40.8	40.5	41.4	41.1	40.8	39.5
Nondurable goods.....	39.3	38.6	38.8	39.0	39.4	39.8	39.6	39.5	39.5	40.1	39.5	39.5	39.7	39.5	38.8
<i>Durable goods</i>															
Ordnance and accessories.....	41.3	40.8	41.5	41.1	41.3	41.8	41.3	41.3	41.1	40.7	41.2	41.2	41.5	41.3	40.9
Lumber and wood products.....	40.3	39.9	38.8	39.4	39.3	40.2	40.1	40.8	40.7	41.1	40.5	41.3	41.1	40.7	39.9
Sawmills and planing mills.....	41.2	40.6	39.0	39.4	39.7	40.7	40.3	40.7	40.7	41.3	41.0	41.6	41.4	41.0	39.8
Millwork, plywood, and prefabricated structural wood products.....	40.2	39.7	39.4	39.4	39.7	40.3	40.3	40.8	40.5	41.6	40.9	41.7	41.8	41.1	40.5
Wooden containers.....	41.2	40.2	39.4	39.5	40.2	40.6	40.1	40.9	40.3	41.1	40.9	41.3	41.5	40.2	39.5
Miscellaneous wood products.....	40.9	40.5	40.7	40.6	40.8	40.8	40.9	41.1	40.5	41.4	41.2	41.2	41.2	41.3	40.3
Furniture and fixtures.....	40.1	39.9	39.1	40.3	40.3	41.8	41.1	41.8	41.3	41.7	40.8	40.8	40.2	40.4	39.5
Household furniture.....	39.8	39.9	38.6	40.2	40.2	42.0	41.5	42.2	41.4	41.7	41.0	40.6	40.1	40.6	39.5
Office, public-building, and professional furniture.....	41.1	40.6	41.0	41.0	41.3	41.9	39.9	41.4	41.2	42.5	41.7	41.1	40.5	40.1	39.5
Partitions, shelving, lockers, and fixtures.....	40.6	39.7	40.2	40.0	40.4	41.4	40.8	40.5	41.0	41.2	38.3	41.7	40.5	39.3	38.9
Screens, blinds, and miscellaneous furniture and fixtures.....	40.2	39.2	40.0	39.8	39.8	40.5	39.8	40.5	39.3	40.8	40.7	41.2	41.2	40.4	40.3
Average hourly earnings															
<b>Manufacturing</b> .....	\$2.29	\$2.28	\$2.29	\$2.29	\$2.29	\$2.27	\$2.23	\$2.21	\$2.22	\$2.19	\$2.23	\$2.24	\$2.23	\$2.22	\$2.13
Durable goods.....	2.24	2.24	2.45	2.45	2.46	2.43	2.38	2.36	2.37	2.35	2.39	2.40	2.40	2.38	2.28
Nondurable goods.....	2.07	2.06	2.06	2.05	2.05	2.04	2.03	2.02	2.03	2.00	2.01	2.00	2.00	2.00	1.94
<i>Durable goods</i>															
Ordnance and accessories.....	2.61	2.61	2.62	2.62	2.62	2.61	2.59	2.58	2.56	2.54	2.55	2.56	2.55	2.52	2.48
Lumber and wood products.....	2.04	2.01	2.00	1.98	1.96	2.00	2.01	2.02	2.03	2.01	1.98	1.99	1.96	1.91	1.89
Sawmills and planing mills.....	1.93	1.92	1.93	1.91	1.91	1.92	1.94	1.95	1.96	1.96	1.93	1.94	1.90	1.85	1.84
Millwork, plywood, and prefabricated structural wood products.....	2.10	2.09	2.08	2.08	2.08	2.07	2.06	2.08	2.06	2.07	2.05	2.06	2.06	2.03	1.96
Wooden containers.....	1.51	1.51	1.50	1.50	1.48	1.48	1.48	1.50	1.54	1.49	1.48	1.48	1.46	1.47	1.44
Miscellaneous wood products.....	1.69	1.68	1.68	1.65	1.65	1.65	1.64	1.64	1.64	1.62	1.62	1.62	1.62	1.60	1.58
Furniture and fixtures.....	1.85	1.85	1.86	1.85	1.85	1.85	1.83	1.83	1.83	1.83	1.83	1.83	1.81	1.81	1.78
Household furniture.....	1.75	1.75	1.76	1.75	1.75	1.76	1.74	1.75	1.74	1.74	1.74	1.74	1.73	1.72	1.69
Office, public-building, and professional furniture.....	2.13	2.14	2.14	2.12	2.13	2.12	2.08	2.08	2.09	2.10	2.10	2.06	2.08	2.06	2.02
Partitions, shelving, lockers, and fixtures.....	2.34	2.32	2.32	2.32	2.32	2.32	2.32	2.27	2.29	2.29	2.29	2.30	2.24	2.24	2.21
Screens, blinds, and miscellaneous furniture and fixtures.....	1.89	1.86	1.87	1.89	1.88	1.86	1.84	1.85	1.82	1.80	1.83	1.84	1.85	1.82	1.78

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959									Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958	
	Average weekly earnings															
Manufacturing—Continued																
Durable goods—Continued																
Stone, clay, and glass products.....	\$92.84	\$91.08	\$90.57	\$90.85	\$91.30	\$92.25	\$91.86	\$91.88	\$91.43	\$92.35	\$92.13	\$92.16	\$91.94	\$90.83	\$84.80	
Flat glass.....	125.29	123.78	124.74	123.48	126.80	127.39	127.68	130.00	133.34	125.76	131.99	134.94	131.24	113.46	113.10	
Glass and glassware, pressed or blown.....	93.38	89.47	91.88	90.63	89.95	88.93	88.65	88.11	84.36	88.80	88.36	87.78	88.80	88.13	83.78	
Glass products made of purchased glass.....	73.15	71.82	70.50	71.62	70.87	75.14	74.21	74.56	72.68	72.71	73.68	74.70	74.80	73.45	71.85	
Cement, hydraulic.....	104.14	101.18	97.66	98.15	100.04	101.02	103.25	99.96	106.17	101.02	101.09	98.88	97.82	98.98	92.92	
Structural clay products.....	83.03	83.03	79.78	80.10	80.40	82.21	81.61	80.99	80.80	82.19	82.19	81.77	81.88	80.39	75.25	
Pottery and related products.....	81.49	81.75	81.79	80.30	80.14	82.60	80.98	81.87	80.35	81.24	78.44	79.80	79.39	79.60	73.34	
Concrete, gypsum, and plaster products.....	93.10	92.02	87.08	89.03	88.83	91.14	90.93	93.72	94.13	95.82	95.37	95.58	94.05	91.96	86.43	
Cut-stone and stone products.....	79.23	77.61	72.20	75.14	75.48	76.96	75.26	77.75	78.96	76.22	74.74	76.59	77.15	75.44	73.31	
Miscellaneous nonmetallic mineral products.....	96.63	95.84	98.29	98.29	99.01	98.53	95.24	95.94	95.46	97.58	97.58	97.86	96.06	96.93	87.96	
Primary metal industries.....	109.98	112.29	114.29	115.26	117.96	117.14	107.96	105.74	106.40	104.91	108.19	118.43	117.88	112.72	100.97	
Blair furnaces, steel works, and rolling mills.....	116.21	122.22	122.80	123.60	128.54	127.72	113.10	116.66	118.73	113.09	111.29	129.38	127.10	122.28	108.00	
Iron and steel foundries.....	97.11	95.48	99.00	99.25	100.35	99.29	94.28	96.14	96.14	96.16	98.40	101.02	100.94	97.44	88.93	
Primary smelting and refining of nonferrous metals.....	108.62	112.25	108.05	107.04	108.92	108.86	108.92	108.53	111.90	104.82	105.26	104.86	104.81	105.93	90.68	
Secondary smelting and refining of nonferrous metals.....	95.06	94.77	95.06	94.66	95.76	96.08	96.28	95.68	96.22	95.49	91.71	94.02	94.66	94.16	88.84	
Rolling, drawing, and alloying of nonferrous metals.....	108.54	106.63	107.87	108.54	109.20	110.92	109.45	109.45	107.71	108.09	111.80	113.85	113.60	110.62	100.90	
Nonferrous foundries.....	101.50	97.32	100.60	101.00	113.16	102.92	100.61	103.58	101.76	99.29	90.65	100.77	96.70	100.28	63.06	
Miscellaneous primary metal industries.....	110.68	110.40	115.08	117.88	118.72	117.32	107.96	108.81	111.11	110.97	113.99	118.71	119.60	113.85	102.41	
Average weekly hours																
Stone, clay, and glass products.....	40.9	40.3	39.9	40.2	40.4	41.0	40.8	41.2	41.6	41.6	41.5	41.7	41.6	41.1	40.0	
Flat glass.....	39.9	39.8	39.6	39.2	40.0	40.7	40.5	41.4	42.6	40.7	41.9	42.1	41.4	41.6	38.6	
Glass and glassware, pressed or blown.....	40.6	38.9	40.3	40.1	39.8	39.7	39.4	39.9	38.0	40.0	39.8	39.9	40.0	39.7	39.7	
Glass products made of purchased glass.....	38.5	38.0	37.3	38.3	37.9	40.4	39.9	40.3	39.5	39.3	39.5	40.6	40.7	39.7	39.1	
Cement, hydraulic.....	41.0	40.8	39.7	39.9	40.5	40.9	41.3	40.8	41.8	41.4	41.6	41.2	41.1	40.9	40.4	
Structural clay products.....	40.9	40.7	39.3	39.7	40.0	40.7	40.6	40.7	40.4	41.3	41.3	41.3	41.2	40.6	39.4	
Pottery and related products.....	37.9	38.2	38.4	37.7	37.1	38.6	38.2	38.8	37.9	38.5	37.0	38.0	37.8	38.0	35.9	
Concrete, gypsum, and plaster products.....	43.3	42.5	40.5	41.8	42.3	43.4	43.3	44.0	44.4	45.2	45.2	45.3	45.0	44.0	43.0	
Cut-stone and stone products.....	41.7	41.5	38.2	40.4	40.8	41.6	40.9	41.8	41.3	41.2	40.4	41.4	41.7	41.0	40.8	
Miscellaneous nonmetallic mineral products.....	40.6	40.1	41.3	41.3	41.6	41.4	40.7	41.0	41.4	41.7	41.7	42.0	42.1	41.6	38.8	
Primary metal industries.....	39.0	39.4	40.1	40.3	41.1	41.1	38.8	39.9	40.0	39.7	38.5	41.7	41.4	40.4	38.1	
Blair furnaces, steel works, and rolling mills.....	38.1	39.3	39.9	40.0	41.2	41.2	37.7	38.0	38.3	36.6	35.9	41.6	41.0	39.7	37.8	
Iron and steel foundries.....	39.0	38.5	39.6	39.7	40.3	40.2	38.8	39.4	39.4	39.9	40.7	41.4	41.2	40.1	37.2	
Primary smelting and refining of nonferrous metals.....	41.3	42.2	41.4	40.7	41.3	40.1	41.1	40.8	41.6	40.2	40.8	40.8	41.1	40.9	40.1	
Secondary smelting and refining of nonferrous metals.....	40.8	40.5	40.8	40.8	41.1	41.4	41.5	41.6	42.2	41.7	40.4	41.5	41.7	41.3	40.2	
Rolling, drawing, and alloying of nonferrous metals.....	40.5	39.9	40.4	40.5	40.9	41.7	41.3	41.3	40.8	41.1	42.0	42.8	42.9	41.9	40.2	
Nonferrous foundries.....	40.6	39.4	40.4	40.4	41.1	41.8	40.9	41.6	41.2	40.9	40.8	41.3	41.2	41.1	39.6	
Miscellaneous primary metal industries.....	40.1	40.0	41.1	41.8	42.1	41.9	39.4	40.3	41.0	41.1	41.3	42.7	42.5	41.4	39.2	
Average hourly earnings																
Stone, clay, and glass products.....	\$2.27	\$2.26	\$2.27	\$2.26	\$2.26	\$2.25	\$2.24	\$2.23	\$2.28	\$2.22	\$2.22	\$2.21	\$2.21	\$2.21	\$2.12	
Flat glass.....	3.14	3.11	3.15	3.15	3.17	3.13	3.15	3.14	3.18	3.09	3.16	3.19	3.17	3.16	2.98	
Glass and glassware, pressed or blown.....	2.30	2.30	2.28	2.26	2.26	2.24	2.25	2.21	2.22	2.22	2.22	2.20	2.22	2.22	2.16	
Glass products made of purchased glass.....	1.90	1.89	1.89	1.87	1.87	1.86	1.86	1.85	1.84	1.85	1.84	1.84	1.84	1.85	1.83	
Cement, hydraulic.....	2.54	2.48	2.46	2.46	2.47	2.47	2.50	2.45	2.54	2.44	2.43	2.40	2.38	2.42	2.30	
Structural clay products.....	2.03	2.04	2.03	2.02	2.01	2.02	2.01	1.99	2.00	1.99	1.99	1.98	1.98	1.98	1.91	
Pottery and related products.....	2.15	2.14	2.13	2.13	2.16	2.14	2.12	2.11	2.12	2.11	2.12	2.10	2.10	2.10	2.04	
Concrete, gypsum, and plaster products.....	2.15	2.15	2.15	2.13	2.10	2.10	2.10	2.13	2.12	2.12	2.11	2.11	2.09	2.09	2.01	
Cut-stone and stone products.....	1.90	1.87	1.89	1.88	1.85	1.85	1.84	1.86	1.84	1.85	1.85	1.85	1.85	1.84	1.81	
Miscellaneous nonmetallic mineral products.....	2.38	2.39	2.38	2.38	2.38	2.38	2.34	2.34	2.33	2.34	2.34	2.33	2.33	2.33	2.21	
Primary metal industries.....	2.82	2.85	2.85	2.86	2.87	2.85	2.78	2.65	2.66	2.64	2.61	2.64	2.64	2.79	2.65	
Blair furnaces, steel works, and rolling mills.....	3.05	3.11	3.08	3.09	3.12	3.10	3.00	3.07	3.10	3.09	3.10	3.11	3.10	3.08	2.98	
Iron and steel foundries.....	2.49	2.48	2.50	2.50	2.49	2.47	2.43	2.44	2.44	2.41	2.42	2.44	2.46	2.43	2.31	
Primary smelting and refining of nonferrous metals.....	2.63	2.66	2.61	2.63	2.63	2.64	2.65	2.69	2.69	2.60	2.58	2.57	2.55	2.59	2.47	
Secondary smelting and refining of nonferrous metals.....	2.33	2.34	2.33	2.32	2.33	2.32	2.32	2.30	2.28	2.29	2.27	2.28	2.27	2.28	2.21	
Rolling, drawing, and alloying of nonferrous metals.....	2.68	2.67	2.67	2.68	2.67	2.68	2.65	2.65	2.64	2.63	2.65	2.66	2.65	2.64	2.51	
Nonferrous foundries.....	2.50	2.47	2.49	2.50	2.51	2.48	2.46	2.49	2.47	2.43	2.44	2.44	2.42	2.44	2.35	
Miscellaneous primary metal industries.....	2.76	2.76	2.80	2.82	2.82	2.80	2.74	2.70	2.71	2.70	2.76	2.78	2.80	2.75	2.61	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959										Annual average	
	May †	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
	Average weekly earnings																
Manufacturing—Continued																	
Durable goods—Continued																	
Fabricated metal products.....	\$99.96	\$96.56	\$98.42	\$98.42	\$100.94	\$99.77	\$94.64	\$96.76	\$99.66	\$99.01	\$97.17	\$99.72	\$98.36	\$97.41	\$90.80		
Tin cans and other tinware.....	116.05	111.66	108.94	108.40	111.25	112.10	110.24	108.24	127.32	117.55	113.85	113.42	114.91	112.36	104.42		
Cutlery, handtools, and hardware.....	93.90	90.85	92.63	91.31	98.00	96.79	88.91	91.02	93.71	92.03	92.25	93.34	92.06	92.25	86.15		
Heating apparatus (except electric) and plumbers' supplies.....	91.89	89.71	91.42	91.42	91.34	92.34	90.02	92.63	92.00	94.25	92.29	93.43	91.88	91.83	87.91		
Fabricated structural metal products.....	100.86	98.74	97.60	97.51	98.25	98.58	94.62	96.56	97.75	98.64	97.77	100.19	98.09	96.72	93.43		
Metal stamping, coating, and engraving.....	108.26	102.21	105.57	107.78	111.54	107.70	99.14	103.07	106.25	107.00	102.75	105.15	103.32	102.58	92.63		
Lighting fixtures.....	89.82	86.02	88.44	88.62	90.72	89.79	84.77	87.72	95.22	96.27	96.46	91.12	89.42	87.72	80.17		
Fabricated wire products.....	89.38	87.91	90.32	90.94	93.56	93.83	89.95	89.01	88.80	86.30	86.40	92.60	92.00	96.00	53.74		
Miscellaneous fabricated metal products.....	95.75	93.77	96.29	98.95	98.77	98.00	93.09	96.28	96.74	96.98	97.81	101.48	101.20	97.44	88.53		
Machinery (except electrical).....	105.73	104.04	105.47	104.55	105.32	105.92	102.82	103.82	103.16	102.34	103.25	104.75	104.00	103.25	94.25		
Engines and turbines.....	113.15	108.38	112.20	110.02	113.01	112.48	110.16	109.76	106.88	110.95	108.81	112.44	112.66	110.42	102.26		
Agricultural machinery and tractors.....	103.17	102.80	102.82	100.75	103.74	102.82	100.40	102.31	101.89	101.35	103.31	106.55	106.14	104.09	95.89		
Construction and mining machinery.....	102.21	101.05	100.65	99.15	100.10	101.09	97.81	99.14	101.27	103.07	102.34	105.72	104.73	101.35	91.89		
Metalworking machinery.....	122.92	120.37	123.76	120.80	119.35	118.48	115.72	115.02	113.10	113.21	114.33	115.83	115.45	114.06	101.88		
Special industry machinery (except metalworking machinery).....	101.70	99.66	102.43	101.28	101.58	101.81	100.25	101.39	99.36	97.81	97.58	99.22	97.39	98.05	89.55		
General industrial machinery.....	103.16	101.34	101.84	100.85	101.84	105.00	102.18	101.76	100.61	101.43	101.43	102.41	100.36	100.94	93.06		
Office and store machines and devices.....	103.02	101.20	103.12	102.36	102.87	102.56	102.41	101.00	100.50	96.43	96.80	96.38	96.49	98.89	93.30		
Service industry and household machines.....	98.89	98.00	96.62	96.29	98.74	102.51	93.65	98.25	97.36	96.96	96.96	98.16	96.22	97.20	90.68		
Miscellaneous machinery parts.....	101.09	98.70	100.85	102.09	102.59	102.67	99.88	101.84	102.67	100.86	102.83	103.81	102.90	101.43	92.73		
Average weekly hours																	
Fabricated metal products.....	40.8	39.9	40.5	40.5	41.2	41.4	40.1	41.0	41.7	41.6	41.0	41.9	41.5	41.1	40.0		
Tin cans and other tinware.....	42.2	40.9	40.2	40.0	40.9	42.3	41.6	41.0	45.8	43.7	42.8	42.8	43.2	42.4	41.6		
Cutlery, handtools, and hardware.....	40.3	39.5	40.1	39.7	41.7	41.9	40.6	41.0	41.1	40.9	41.0	41.3	41.1	41.0	39.7		
Heating apparatus (except electric) and plumbers' supplies.....	39.1	38.5	38.9	38.9	39.2	39.8	38.8	40.1	40.0	40.8	40.3	40.8	40.3	40.1	39.6		
Fabricated structural metal products.....	41.0	40.3	40.0	39.8	40.1	40.4	39.1	40.4	40.9	41.1	40.4	41.4	40.7	40.3	40.1		
Metal stamping, coating, and engraving.....	41.8	40.4	41.4	42.1	42.9	42.4	40.8	41.9	42.5	42.8	41.6	42.4	42.0	41.7	40.1		
Lighting fixtures.....	40.1	39.1	40.2	40.1	40.5	40.9	39.8	40.8	42.7	40.5	40.4	41.8	41.4	40.8	39.3		
Fabricated wire products.....	39.9	39.6	40.5	40.6	41.4	41.7	40.7	41.4	41.3	40.9	40.0	41.9	41.9	41.1	39.5		
Miscellaneous fabricated metal products.....	40.4	39.9	41.3	41.4	41.5	41.7	40.3	41.5	41.7	41.8	41.8	43.1	42.1	42.0	39.7		
Machinery (except electrical).....	41.3	40.8	41.2	41.0	41.3	41.7	40.8	41.2	41.1	41.1	41.3	41.9	41.6	41.3	39.6		
Engines and turbines.....	40.7	39.7	41.1	40.3	41.7	41.2	40.5	40.5	41.0	41.4	40.6	41.8	42.0	41.2	40.1		
Agricultural machinery and tractors.....	40.3	40.0	39.7	38.9	39.9	39.7	38.8	39.5	39.8	39.9	40.2	41.3	41.3	40.5	39.5		
Construction and mining machinery.....	40.4	40.1	40.1	39.5	40.2	40.6	39.6	40.2	41.0	41.9	41.6	42.8	42.4	41.2	39.1		
Metalworking machinery.....	43.9	43.3	44.2	43.5	43.4	43.4	42.7	42.6	42.2	42.4	42.5	42.9	42.6	42.4	39.6		
Special industry machinery (except metalworking machinery).....	42.2	41.7	42.5	42.2	42.5	42.6	42.3	42.6	42.1	41.8	41.7	42.4	41.8	41.9	39.8		
General industrial machinery.....	41.1	40.7	40.9	40.5	40.9	42.0	41.2	41.2	40.9	41.4	41.4	41.8	41.3	41.2	39.6		
Office and store machines and devices.....	40.4	40.0	40.6	40.3	40.5	40.7	40.8	40.4	40.2	39.2	40.9	40.4	40.2	40.2	39.7		
Service industry and household machines.....	40.2	40.0	39.6	40.2	40.3	41.5	38.7	40.6	40.4	40.4	40.4	40.9	40.6	40.5	39.6		
Miscellaneous machinery parts.....	40.6	39.8	40.5	41.0	41.2	41.4	40.6	41.4	41.4	41.0	41.8	42.2	42.0	41.4	39.8		
Average hourly earnings																	
Fabricated metal products.....	\$2.45	\$2.42	\$2.43	\$2.43	\$2.45	\$2.41	\$2.36	\$2.36	\$2.36	\$2.36	\$2.47	\$2.46	\$2.46	\$2.37	\$2.27		
Tin cans and other tinware.....	2.75	2.73	2.71	2.71	2.72	2.65	2.65	2.64	2.78	2.69	2.66	2.65	2.66	2.65	2.51		
Cutlery, handtools, and hardware.....	2.33	2.30	2.31	2.30	2.35	2.31	2.19	2.22	2.28	2.25	2.25	2.26	2.24	2.25	2.17		
Heating apparatus (except electric) and plumbers' supplies.....	2.35	2.33	2.35	2.35	2.33	2.32	2.32	2.31	2.30	2.31	2.29	2.29	2.38	2.29	2.23		
Fabricated structural metal products.....	2.46	2.45	2.44	2.45	2.45	2.44	2.42	2.39	2.39	2.40	2.42	2.42	2.41	2.40	2.33		
Metal stamping, coating, and engraving.....	2.59	2.53	2.55	2.56	2.60	2.54	2.43	2.46	2.50	2.50	2.47	2.48	2.46	2.46	2.31		
Lighting fixtures.....	2.24	2.20	2.20	2.21	2.24	2.21	2.13	2.15	2.23	2.13	2.14	2.18	2.16	2.15	2.04		
Fabricated wire products.....	2.24	2.22	2.23	2.24	2.26	2.25	2.21	2.18	2.15	2.11	2.16	2.21	2.21	2.18	2.12		
Miscellaneous fabricated metal products.....	2.37	2.35	2.38	2.39	2.38	2.35	2.31	2.32	2.32	2.32	2.34	2.36	2.35	2.32	2.23		
Machinery (except electrical).....	2.56	2.55	2.56	2.55	2.55	2.54	2.52	2.52	2.51	2.49	2.50	2.50	2.50	2.50	2.38		
Engines and turbines.....	2.78	2.73	2.73	2.73	2.71	2.73	2.72	2.71	2.68	2.68	2.68	2.69	2.68	2.68	2.55		
Agricultural machinery and tractors.....	2.56	2.57	2.59	2.59	2.60	2.59	2.59	2.59	2.56	2.54	2.57	2.58	2.57	2.57	2.42		
Construction and mining machinery.....	2.53	2.52	2.51	2.51	2.49	2.49	2.47	2.46	2.47	2.46	2.46	2.47	2.47	2.46	2.35		
Metalworking machinery.....	2.80	2.78	2.80	2.77	2.75	2.73	2.71	2.70	2.68	2.67	2.69	2.70	2.71	2.69	2.56		
Special industry machinery (except metalworking machinery).....	2.41	2.39	2.41	2.40	2.39	2.39	2.37	2.38	2.36	2.34	2.34	2.34	2.33	2.34	2.25		
General industrial machinery.....	2.51	2.49	2.49	2.49	2.49	2.50	2.48	2.47	2.46	2.45	2.45	2.45	2.43	2.45	2.35		
Office and store machines and devices.....	2.55	2.53	2.54	2.54	2.54	2.52	2.51	2.50	2.50	2.46	2.44	2.46	2.45	2.46	2.35		
Service industry and household machines.....	2.46	2.45	2.44	2.47	2.45	2.47	2.42	2.42	2.41	2.40	2.40	2.46	2.37	2.40	2.29		
Miscellaneous machinery parts.....	2.49	2.48	2.49	2.49	2.49	2.48	2.46	2.46	2.48	2.45	2.46	2.46	2.45	2.45	2.33		

See footnotes at end of table.



TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959										Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
<b>Manufacturing—Continued</b>																	
<b>Durable goods—Continued</b>																	
<b>Average weekly earnings</b>																	
Electrical machinery.....	\$90.97	\$88.98	\$91.43	\$90.97	\$92.80	\$93.07	\$90.72	\$91.39	\$90.76	\$89.91	\$89.02	\$90.58	\$89.51	\$89.91	\$85.14		
Electrical generating, transmission, distribution, and industrial apparatus.....	96.24	94.25	96.15	95.84	96.87	97.88	95.18	94.30	94.13	94.19	94.50	96.00	94.25	94.19	86.72		
Electrical appliances.....	91.80	89.17	91.10	91.80	91.01	91.03	89.55	91.48	89.67	88.48	89.04	89.27	87.53	89.27	85.36		
Insulated wire and cable.....	88.62	84.66	89.46	89.24	88.39	88.15	85.70	85.08	86.30	84.46	85.94	86.24	88.41	87.15	86.11		
Electrical equipment for vehicles.....	97.02	95.40	96.53	98.65	104.25	101.52	91.54	94.08	96.50	89.62	94.47	96.46	96.39	96.56	89.47		
Electric lamps.....	87.30	86.41	88.36	87.42	86.91	91.24	92.77	93.21	89.19	86.48	83.95	85.84	88.37	88.13	86.57		
Communication equipment.....	87.34	85.19	88.18	87.34	89.10	88.73	88.22	88.90	88.15	87.51	85.14	86.67	85.63	86.86	81.97		
Miscellaneous electrical products.....	89.65	89.20	89.60	88.65	91.13	93.18	90.42	90.67	89.40	89.79	90.01	88.34	86.86	88.94	85.03		
Transportation equipment.....	110.70	107.59	110.84	111.79	115.92	110.70	104.66	109.62	108.40	108.14	108.53	106.06	107.98	107.73	100.60		
Motor vehicles and equipment.....	112.33	108.23	113.83	116.62	124.11	113.29	102.38	113.03	111.48	110.16	111.10	111.22	111.76	110.16	96.96		
Aircraft and parts.....	110.29	107.07	109.34	108.81	108.40	109.88	108.00	108.26	107.06	107.18	106.78	107.98	105.71	106.63	101.91		
Ship and boat building and repairing.....	105.20	103.49	103.62	102.31	101.92	102.44	101.26	99.20	99.84	102.87	102.70	100.74	101.91	101.40	98.00		
Railroad equipment.....	111.11	110.26	112.18	102.11	110.15	109.69	102.65	103.47	106.70	110.12	111.38	113.42	105.00	107.41	100.70		
Other transportation equipment.....	86.63	84.58	84.10	87.42	87.07	89.82	86.41	91.17	89.98	91.05	86.43	90.23	90.47	86.13	82.74		
<b>Average weekly hours</b>																	
Electrical machinery.....	39.9	39.2	40.1	39.9	40.7	41.0	40.5	40.8	40.7	40.5	40.1	40.8	40.5	40.5	39.6		
Electrical generating, transmission, distribution, and industrial apparatus.....	40.1	39.6	40.4	40.1	40.7	41.3	40.5	40.3	40.4	40.6	40.6	41.2	40.8	40.6	39.7		
Electrical appliances.....	39.4	38.6	39.1	39.4	39.4	40.1	39.8	40.3	39.5	39.5	39.4	39.5	38.9	39.5	38.8		
Insulated wire and cable.....	42.2	40.9	42.6	42.7	42.7	43.0	41.4	41.1	40.9	40.8	41.4	42.7	42.3	41.9	41.4		
Electrical equipment for vehicles.....	39.6	39.1	39.4	40.1	41.7	41.1	38.3	39.2	40.0	38.3	40.2	40.7	40.5	40.4	38.9		
Electric lamps.....	39.5	39.1	39.8	39.2	40.5	41.1	41.6	41.8	41.1	40.6	39.6	40.3	41.1	40.8	39.3		
Communication equipment.....	39.7	38.9	39.9	39.7	40.5	40.7	40.7	41.2	41.0	40.7	39.6	40.5	40.2	40.4	39.6		
Miscellaneous electrical products.....	40.2	40.0	40.0	39.4	40.5	41.6	41.1	41.4	41.2	41.0	41.1	40.9	40.4	40.8	40.3		
Transportation equipment.....	40.7	39.7	40.6	40.8	42.0	40.7	39.2	40.6	40.6	40.2	40.8	41.0	40.9	40.5	39.8		
Motor vehicles and equipment.....	40.7	39.5	40.8	41.5	43.7	40.9	38.2	41.1	40.1	40.2	41.3	41.5	41.7	40.8	39.2		
Aircraft and parts.....	41.0	40.1	40.8	40.6	40.6	41.0	40.6	40.7	40.4	40.6	40.6	40.9	40.5	40.7	40.6		
Ship and boat building and repairing.....	40.0	39.5	39.4	39.2	39.9	39.1	38.5	38.3	38.4	39.0	39.2	39.2	39.5	39.0	39.2		
Railroad equipment.....	39.4	39.1	39.5	36.6	39.2	39.6	37.6	37.9	38.8	39.9	40.5	40.8	38.4	39.2	38.0		
Other transportation equipment.....	39.2	38.8	38.4	39.2	39.4	40.1	39.1	40.7	40.9	41.2	40.2	41.2	41.5	40.7	39.4		
<b>Average hourly earnings</b>																	
Electrical machinery.....	\$2.28	\$2.27	\$2.28	\$2.28	\$2.28	\$2.27	\$2.24	\$2.24	\$2.23	\$2.22	\$2.22	\$2.22	\$2.21	\$2.22	\$2.15		
Electrical generating, transmission, distribution, and industrial apparatus.....	2.40	2.38	2.38	2.39	2.38	2.37	2.35	2.34	2.33	2.32	2.33	2.33	2.31	2.32	2.26		
Electrical appliances.....	2.33	2.31	2.33	2.33	2.31	2.27	2.25	2.27	2.27	2.24	2.26	2.26	2.25	2.26	2.20		
Insulated wire and cable.....	2.10	2.07	2.10	2.09	2.07	2.05	2.07	2.07	2.11	2.07	2.10	2.09	2.09	2.08	2.08		
Electrical equipment for vehicles.....	2.45	2.44	2.45	2.46	2.50	2.47	2.39	2.40	2.42	2.34	2.35	2.37	2.38	2.39	2.30		
Electric lamps.....	2.21	2.21	2.22	2.23	2.22	2.22	2.23	2.23	2.17	2.18	2.12	2.13	2.15	2.16	2.05		
Communication equipment.....	2.20	2.19	2.21	2.20	2.20	2.18	2.17	2.16	2.15	2.15	2.15	2.14	2.13	2.15	2.07		
Miscellaneous electrical products.....	2.23	2.23	2.24	2.25	2.25	2.24	2.20	2.19	2.17	2.19	2.19	2.16	2.15	2.18	2.11		
Transportation equipment.....	2.72	2.71	2.73	2.74	2.76	2.72	2.67	2.70	2.71	2.69	2.66	2.66	2.64	2.66	2.53		
Motor vehicles and equipment.....	2.76	2.74	2.79	2.81	2.84	2.77	2.68	2.75	2.78	2.74	2.69	2.66	2.66	2.70	2.55		
Aircraft and parts.....	2.69	2.67	2.68	2.68	2.67	2.68	2.66	2.66	2.65	2.64	2.63	2.64	2.61	2.62	2.51		
Ship and boat building and repairing.....	2.63	2.62	2.63	2.61	2.62	2.62	2.63	2.59	2.60	2.63	2.62	2.57	2.58	2.60	2.50		
Railroad equipment.....	2.82	2.82	2.84	2.79	2.81	2.77	2.73	2.73	2.75	2.76	2.76	2.78	2.75	2.74	2.65		
Other transportation equipment.....	2.21	2.18	2.19	2.23	2.21	2.24	2.21	2.24	2.20	2.21	2.15	2.19	2.18	2.19	2.10		

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959								Annual average	
	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958
<b>Manufacturing—Continued</b>															
Average weekly earnings															
<b>Durable goods—Continued</b>															
Instruments and related products.....	\$94.77	\$93.43	\$95.88	\$94.07	\$94.10	\$96.23	\$94.71	\$94.53	\$93.89	\$93.48	\$93.71	\$94.35	\$91.98	\$93.26	\$87.38
Laboratory, scientific, and engineering instruments.....	112.06	110.97	116.75	113.57	112.05	116.14	112.44	112.14	110.66	112.63	109.93	112.10	108.42	111.14	103.07
Mechanical measuring and controlling instruments.....	93.90	92.80	95.06	92.34	93.61	94.94	92.97	92.80	91.80	91.98	93.52	95.20	93.30	92.62	86.72
Optical instruments and lenses.....	98.36	94.13	96.00	97.11	95.06	97.48	92.87	95.68	95.63	93.84	93.30	90.03	90.35	92.25	88.51
Surgical, medical, and dental instruments.....	83.62	81.80	84.66	82.99	83.84	83.64	83.64	83.44	84.87	83.03	83.64	82.62	81.41	82.82	78.00
Ophthalmic goods.....	80.40	79.20	79.18	79.60	79.19	79.59	79.38	77.39	76.44	77.97	78.94	78.55	77.16	77.59	71.41
Photographic apparatus.....	105.08	105.82	106.86	104.90	104.86	109.65	108.20	107.43	105.98	104.55	105.32	105.32	103.63	104.65	97.53
Watches and clocks.....	77.61	75.65	77.03	76.82	77.81	77.41	78.80	80.87	79.77	79.15	77.01	77.42	75.46	77.41	78.71
<b>Miscellaneous manufacturing industries</b>															
Jewelry, silverware, and plated ware.....	77.60	76.05	78.18	77.81	78.20	78.76	77.16	77.33	76.95	76.76	75.60	76.95	76.57	76.57	73.26
Musical instruments and parts.....	80.36	80.16	80.54	79.35	79.10	84.91	83.66	83.46	81.25	79.68	75.17	77.87	78.47	79.46	75.70
Toys and sporting goods.....	87.42	86.58	88.32	88.70	88.32	92.42	92.18	93.94	91.78	88.34	85.24	86.93	86.88	88.99	83.79
Pens, pencils, other office supplies.....	71.71	69.32	71.53	70.80	70.64	70.59	70.62	70.75	70.80	68.73	67.69	67.69	68.38	69.17	66.91
Costume jewelry, buttons, notions.....	72.18	69.95	70.88	70.92	70.13	71.96	70.80	70.58	70.75	71.96	68.82	71.69	70.22	70.58	67.72
Fabricated plastics products.....	68.29	66.33	68.73	69.17	69.52	69.48	68.64	69.87	70.55	69.30	66.39	70.88	70.35	68.90	65.18
Other manufacturing industries.....	83.03	80.40	83.02	83.23	84.04	83.83	82.39	83.40	83.00	83.00	83.40	83.82	83.20	83.20	79.17
Other manufacturing industries.....	80.80	79.59	82.01	80.79	81.00	81.20	78.41	78.70	78.41	79.99	79.70	81.00	79.40	79.40	76.04
Average weekly hours															
Instruments and related products.....	40.5	40.1	40.8	40.2	40.6	41.3	41.0	41.1	41.0	41.0	41.1	41.2	40.7	40.9	39.9
Laboratory, scientific, and engineering instruments.....	41.2	41.1	42.3	41.6	41.5	42.7	41.8	42.0	41.6	42.5	41.8	42.3	41.7	42.1	40.9
Mechanical measuring and controlling instruments.....	40.3	40.0	40.8	39.8	40.7	41.1	40.6	40.7	40.8	40.7	41.2	41.8	41.1	40.8	39.6
Optical instruments and lenses.....	41.5	40.4	41.2	41.5	40.8	42.2	40.6	41.6	41.4	40.8	41.1	40.2	41.0	40.1	40.6
Surgical, medical, and dental instruments.....	40.2	39.9	40.7	39.9	40.5	40.8	40.6	40.7	41.2	40.5	41.0	40.7	40.3	40.6	40.0
Ophthalmic goods.....	40.4	39.8	39.2	40.0	40.2	40.4	40.5	40.1	39.4	40.4	40.9	40.7	40.4	40.2	38.6
Photographic apparatus.....	40.8	40.7	41.1	40.5	40.8	42.5	42.1	41.8	41.4	41.0	41.3	41.3	40.8	41.2	40.3
Watches and clocks.....	39.0	38.4	39.1	38.8	39.3	38.9	40.0	40.9	40.7	40.8	39.9	39.7	39.3	39.9	39.0
<b>Miscellaneous manufacturing industries</b>															
Jewelry, silverware, and plated ware.....	40.0	39.2	40.3	39.9	40.1	40.6	40.4	40.7	40.5	40.4	40.0	40.8	40.3	40.3	39.6
Musical instruments and parts.....	41.0	40.9	41.3	40.9	41.2	43.1	42.9	42.8	42.1	41.5	40.2	41.2	41.3	41.6	40.7
Toys and sporting goods.....	40.1	39.9	40.7	40.5	40.7	42.2	41.9	42.7	42.1	40.9	40.4	41.2	40.6	41.2	39.9
Pens, pencils, other office supplies.....	39.4	38.3	39.3	38.9	38.6	39.0	39.9	40.2	40.0	39.5	38.9	38.9	39.3	39.3	38.9
Costume jewelry, buttons, notions.....	40.1	39.3	39.6	39.4	39.4	40.2	40.0	40.1	40.2	40.6	39.1	40.5	39.9	40.1	39.6
Fabricated plastics products.....	38.8	37.9	39.5	39.3	39.5	39.7	39.0	39.7	40.1	39.6	38.6	40.5	40.2	39.6	38.8
Other manufacturing industries.....	40.7	39.8	41.1	41.0	41.4	41.5	41.4	41.7	41.5	41.5	41.7	41.7	41.6	41.6	40.6
Other manufacturing industries.....	40.0	39.4	40.4	39.8	39.9	40.4	39.8	40.2	39.8	40.4	40.3	40.5	39.9	40.1	39.4
Average hourly earnings															
Instruments and related products.....	\$2.34	\$2.33	\$2.35	\$2.34	\$2.32	\$2.33	\$2.31	\$2.30	\$2.29	\$2.28	\$2.28	\$2.29	\$2.26	\$2.28	\$2.19
Laboratory, scientific, and engineering instruments.....	2.72	2.70	2.76	2.73	2.70	2.72	2.69	2.67	2.66	2.65	2.63	2.65	2.60	2.64	2.52
Mechanical measuring and controlling instruments.....	2.33	2.32	2.33	2.32	2.30	2.31	2.29	2.28	2.25	2.26	2.27	2.28	2.27	2.27	2.19
Optical instruments and lenses.....	2.37	2.33	2.33	2.34	2.33	2.31	2.28	2.30	2.31	2.30	2.27	2.24	2.22	2.25	2.18
Surgical, medical, and dental instruments.....	2.08	2.05	2.08	2.08	2.07	2.05	2.06	2.05	2.06	2.05	2.04	2.03	2.02	2.04	1.95
Ophthalmic goods.....	1.99	1.99	2.02	1.99	1.97	1.97	1.96	1.93	1.94	1.93	1.93	1.93	1.91	1.93	1.85
Photographic apparatus.....	2.60	2.60	2.60	2.59	2.57	2.58	2.57	2.57	2.56	2.55	2.55	2.55	2.54	2.54	2.42
Watches and clocks.....	1.99	1.97	1.97	1.98	1.98	1.99	1.97	1.97	1.96	1.94	1.93	1.95	1.92	1.94	1.89
<b>Miscellaneous manufacturing industries</b>															
Jewelry, silverware, and plated ware.....	1.94	1.94	1.94	1.95	1.95	1.94	1.91	1.90	1.90	1.90	1.89	1.90	1.90	1.90	1.85
Musical instruments and parts.....	1.96	1.96	1.95	1.94	1.92	1.97	1.95	1.95	1.93	1.92	1.87	1.89	1.90	1.91	1.86
Toys and sporting goods.....	2.18	2.17	2.17	2.19	2.17	2.19	2.20	2.20	2.18	2.16	2.11	2.11	2.14	2.16	2.10
Pens, pencils, other office supplies.....	1.82	1.81	1.82	1.82	1.83	1.81	1.77	1.76	1.77	1.74	1.74	1.74	1.74	1.76	1.73
Costume jewelry, buttons, notions.....	1.80	1.78	1.79	1.80	1.78	1.79	1.77	1.76	1.76	1.77	1.76	1.77	1.76	1.76	1.71
Fabricated plastics products.....	1.76	1.75	1.74	1.76	1.76	1.75	1.76	1.76	1.76	1.75	1.72	1.75	1.75	1.74	1.68
Other manufacturing industries.....	2.04	2.02	2.02	2.03	2.03	2.02	1.99	2.00	2.00	2.00	2.00	2.01	2.00	2.00	1.95
Other manufacturing industries.....	2.02	2.02	2.03	2.03	2.03	2.01	1.97	1.96	1.97	1.98	1.98	2.00	1.99	1.98	1.93

(See footnotes at end of table.)

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959										Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
	Average weekly earnings																
Manufacturing—Continued																	
Nondurable goods																	
Food and kindred products.....	\$88.91	\$87.16	\$86.94	\$86.33	\$88.91	\$88.78	\$87.74	\$88.68	\$86.11	\$84.87	\$85.48	\$85.69	\$85.68	\$85.68	\$81.81		
Meat products.....	99.31	95.74	95.01	95.26	104.66	104.73	105.22	103.95	101.29	95.06	95.53	94.60	94.54	97.23	91.06		
Dairy products.....	89.23	89.21	87.53	87.53	87.53	86.30	86.30	86.73	90.82	86.53	87.56	87.77	96.11	86.32	81.90		
Canning and preserving.....	70.95	69.75	69.75	69.17	68.74	68.15	68.47	65.74	67.82	71.65	66.62	66.42	67.42	67.64	66.13		
Grain-mill products.....	93.96	92.87	94.61	92.87	95.70	93.96	95.05	93.96	96.57	93.73	93.40	92.38	90.30	92.66	86.79		
Bakery products.....	86.83	85.79	85.39	84.56	83.92	85.22	85.01	84.42	85.67	83.21	84.25	84.25	83.43	83.21	79.00		
Sugar.....	97.35	95.88	98.77	95.88	94.61	97.31	94.77	82.62	98.59	93.84	94.58	93.99	103.60	93.10	59.79		
Confectionery and related products.....	71.68	68.92	70.67	69.38	70.49	68.90	69.55	69.65	70.47	69.48	69.92	70.27	69.34	68.90	60.30		
Beverages.....	99.79	100.19	95.16	93.03	93.99	96.07	95.26	93.59	100.67	99.60	99.90	98.77	98.06	96.80	92.23		
Miscellaneous food products.....	85.70	84.85	84.85	86.11	85.49	86.73	87.35	86.73	87.78	85.27	84.44	83.80	83.92	84.65	80.95		
Tobacco manufactures.....	68.40	64.80	59.86	61.37	66.05	67.49	64.58	63.92	63.40	65.93	70.58	67.99	67.51	65.40	62.56		
Cigarettes.....	80.26	77.17	67.47	72.76	83.23	83.64	81.81	83.00	82.30	87.44	87.31	80.60	81.41	81.80	77.55		
Cigars.....	54.58	49.48	53.05	52.26	53.20	53.11	55.58	55.34	54.53	53.06	52.78	54.14	51.99	53.02	51.79		
Tobacco and snuff.....	68.08	66.06	62.10	61.94	66.38	68.08	60.70	66.64	66.35	67.12	68.60	67.03	67.41	66.82	62.79		
Tobacco stemming and redrying.....	59.78	55.32	50.81	50.75	50.90	57.65	44.82	49.29	52.27	50.65	56.19	60.64	62.95	62.40	49.92		
Average weekly hours																	
Food and kindred products.....	40.6	39.8	39.7	39.6	40.6	41.1	41.0	40.8	41.4	41.4	40.9	41.0	40.8	40.8	40.7		
Meat products.....	40.7	39.4	39.1	39.2	42.2	42.4	43.3	43.3	43.1	40.8	41.0	40.6	40.4	41.2	40.3		
Dairy products.....	41.5	41.3	40.9	40.9	40.9	40.9	40.9	41.3	42.7	41.8	42.3	42.4	41.8	41.7	42.0		
Canning and preserving.....	39.2	37.7	37.5	37.8	38.4	38.5	36.5	36.0	39.2	41.9	38.0	39.3	39.2	39.1	38.6		
Grain-mill products.....	43.5	42.6	43.2	42.6	43.5	43.1	43.6	43.5	44.3	43.8	44.1	44.2	43.0	43.5	43.8		
Bakery products.....	40.2	39.9	39.9	39.7	39.4	40.2	40.1	40.2	40.6	40.2	40.7	40.7	40.5	40.2	40.1		
Sugar.....	40.4	40.8	41.5	41.5	43.2	43.9	48.6	40.9	41.6	40.8	41.3	41.0	43.9	43.3	44.2		
Confectionery and related products.....	39.6	38.5	39.7	39.2	39.6	39.6	40.2	39.8	40.5	39.7	39.5	39.7	39.4	39.6	39.7		
Beverages.....	40.4	40.4	39.0	38.6	39.0	39.7	39.2	39.5	41.6	41.5	41.8	41.5	41.2	40.5	40.1		
Miscellaneous food products.....	41.2	40.6	40.6	41.2	41.1	41.9	42.2	41.9	42.2	41.5	41.8	41.9	41.7	41.7	41.3		
Tobacco manufactures.....	38.0	36.0	34.8	36.1	38.4	39.7	38.2	40.2	40.9	40.7	40.1	39.8	38.8	39.4	39.1		
Cigarettes.....	38.4	37.1	33.4	36.2	40.6	41.0	40.3	41.8	41.1	43.5	42.8	40.5	40.5	40.9	40.8		
Cigars.....	37.9	34.6	37.1	36.8	37.2	37.4	38.6	38.7	38.4	37.9	37.7	38.4	38.8	37.6	37.8		
Tobacco and snuff.....	37.2	36.1	34.5	34.8	37.5	38.9	37.9	38.3	37.7	38.8	39.2	38.3	38.3	38.4	37.6		
Tobacco stemming and redrying.....	36.9	36.0	34.1	35.0	36.1	40.6	33.7	40.4	43.2	40.2	37.7	37.9	39.1	39.4	38.7		
Average hourly earnings																	
Food and kindred products.....	\$2.19	\$2.19	\$2.19	\$2.18	\$2.19	\$2.16	\$2.14	\$2.10	\$2.06	\$2.05	\$2.09	\$2.09	\$2.10	\$2.10	\$2.01		
Meat products.....	2.44	2.43	2.43	2.43	2.48	2.47	2.43	2.38	2.35	2.33	2.33	2.33	2.34	2.36	2.25		
Dairy products.....	2.15	2.16	2.14	2.14	2.14	2.11	2.11	2.10	2.12	2.07	2.07	2.07	2.06	2.07	1.95		
Canning and preserving.....	1.81	1.85	1.86	1.83	1.79	1.77	1.72	1.73	1.73	1.71	1.71	1.69	1.72	1.73	1.67		
Grain-mill products.....	2.16	2.18	2.19	2.18	2.20	2.18	2.18	2.16	2.18	2.14	2.12	2.09	2.10	2.13	2.05		
Bakery products.....	2.10	2.15	2.14	2.13	2.13	2.12	2.12	2.10	2.11	2.07	2.07	2.07	2.06	2.07	1.97		
Sugar.....	2.41	2.35	2.38	2.29	2.19	1.99	1.95	2.02	2.37	2.30	2.29	2.29	2.30	2.15	2.08		
Confectionery and related products.....	1.81	1.79	1.78	1.77	1.78	1.74	1.73	1.75	1.74	1.75	1.77	1.77	1.76	1.74	1.67		
Beverages.....	2.47	2.48	2.44	2.41	2.41	2.42	2.43	2.42	2.42	2.40	2.39	2.38	2.38	2.39	2.30		
Miscellaneous food products.....	2.08	2.09	2.09	2.09	2.08	2.07	2.07	2.07	2.06	2.04	2.02	2.00	2.01	2.03	1.96		
Tobacco manufactures.....	1.80	1.80	1.72	1.70	1.72	1.70	1.69	1.80	1.85	1.62	1.76	1.73	1.74	1.66	1.60		
Cigarettes.....	2.09	2.08	2.02	2.01	2.05	2.04	2.03	2.00	2.00	2.01	2.04	1.99	2.01	2.00	1.61		
Cigars.....	1.44	1.43	1.43	1.42	1.43	1.42	1.44	1.43	1.42	1.40	1.40	1.41	1.41	1.41	1.37		
Tobacco and snuff.....	1.83	1.83	1.80	1.78	1.77	1.75	1.76	1.74	1.76	1.73	1.75	1.76	1.76	1.74	1.67		
Tobacco stemming and redrying.....	1.62	1.62	1.49	1.45	1.41	1.42	1.33	1.22	1.21	1.29	1.67	1.60	1.61	1.33	1.29		

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959										Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
Average weekly earnings																	
Manufacturing—Continued																	
Nondurable goods—Continued																	
Textile-mill products.....	\$65.36	\$63.76	\$63.83	\$64.16	\$64.48	\$64.87	\$64.40	\$64.40	\$63.28	\$64.87	\$63.83	\$64.46	\$63.83	\$63.43	\$58.29		
Scouring and combing plants.....	73.15	70.69	70.18	69.70	72.25	71.06	70.63	69.72	74.34	70.11	75.16	75.85	73.87	72.16	64.96		
Yarn and thread mills.....	59.89	59.49	58.59	59.70	60.20	60.35	59.90	59.90	59.40	60.20	59.45	60.35	59.45	58.95	82.26		
Broad-woven fabric mills.....	66.58	64.96	65.12	64.27	64.74	65.82	64.74	64.74	63.27	64.90	63.71	64.70	63.55	63.29	56.26		
Narrow fabrics and smallwares.....	66.50	65.11	66.17	65.76	65.36	66.75	65.27	65.11	65.36	64.96	65.69	66.98	66.65	65.53	60.87		
Knitting mills.....	58.22	55.95	55.48	56.47	56.32	56.77	57.96	57.96	57.45	58.71	57.18	58.41	57.66	57.51	54.75		
Dyeing and finishing textiles.....	73.51	71.28	71.05	71.10	70.58	73.78	72.53	72.31	66.66	71.04	70.45	74.22	72.24	71.48	66.83		
Carpets, rugs, other floor coverings.....	79.00	78.99	79.97	81.32	81.71	81.32	79.17	80.73	80.73	81.51	82.91	79.76	81.71	81.51	77.30		
Hats (except cloth and millinery).....	61.66	58.64	59.49	59.57	62.24	63.00	57.78	57.26	60.02	64.90	60.35	62.93	62.73	61.71	58.74		
Miscellaneous textile goods.....	75.76	73.42	74.37	76.30	77.27	76.45	72.68	74.52	74.52	74.48	74.44	75.03	73.89	73.71	68.95		
Apparel and other finished textile products.....	55.90	53.70	55.85	56.11	55.44	55.85	56.15	55.02	55.69	56.85	55.57	55.05	55.63	55.63	53.45		
Men's and boys' suits and coats.....	69.48	65.49	66.95	68.00	67.08	68.32	68.02	67.28	67.28	67.61	64.18	65.68	65.84	65.47	60.37		
Men's and boys' furnishings and work clothing.....	48.84	47.29	47.35	48.58	48.58	49.13	49.65	49.27	49.91	49.66	48.90	49.02	48.50	48.76	48.05		
Women's outerwear.....	58.65	56.10	59.09	59.86	58.14	58.99	58.48	55.76	57.61	61.24	60.20	57.29	60.01	59.51	57.63		
Women's, children's undergarments.....	51.19	48.99	50.41	51.18	50.96	51.52	53.02	52.36	51.52	51.90	50.09	51.18	50.68	51.29	49.59		
Millinery.....	56.06	54.65	67.13	71.04	65.08	60.82	58.70	60.64	67.32	68.61	64.33	56.43	62.10	62.93	64.05		
Children's outerwear.....	51.91	48.79	51.70	52.48	52.62	50.54	52.91	50.26	50.20	51.24	53.02	52.06	51.01	51.10	50.23		
Miscellaneous apparel and accessories.....	52.27	51.26	52.71	52.42	52.20	52.91	52.91	52.62	52.91	53.82	52.89	52.97	51.69	52.54	50.75		
Other fabricated textile products.....	61.66	58.67	60.96	60.38	59.78	59.97	59.52	59.90	59.75	58.75	59.28	60.13	59.44	59.59	56.85		
Average weekly hours																	
Textile-mill products.....	40.1	39.6	39.4	40.1	40.3	40.8	40.5	40.5	39.5	40.8	40.4	40.8	40.4	40.4	38.6		
Scouring and combing plants.....	41.8	41.1	40.8	41.0	42.5	41.8	40.3	40.3	42.0	41.0	43.7	44.1	43.2	42.2	40.6		
Yarn and thread mills.....	39.4	39.4	38.8	39.8	40.4	40.5	40.2	40.2	39.6	40.4	39.9	40.5	39.9	40.1	37.4		
Broad-woven fabric mills.....	41.1	40.6	40.7	41.2	41.5	42.0	41.5	41.5	40.3	41.6	41.1	41.3	41.0	41.1	38.6		
Narrow fabrics and smallwares.....	40.3	39.7	40.1	40.1	40.1	40.7	39.8	39.7	40.1	40.1	40.8	41.6	41.4	40.7	39.2		
Knitting mills.....	38.3	37.3	36.5	37.4	37.3	38.1	38.9	38.7	38.3	39.4	38.6	39.2	38.7	38.6	37.6		
Dyeing and finishing textiles.....	41.3	40.5	40.6	41.1	40.8	42.4	42.1	41.8	40.5	41.3	41.2	42.9	42.0	41.8	40.5		
Carpets, rugs, other floor coverings.....	40.1	40.3	40.8	41.7	41.9	41.7	40.6	41.4	41.4	41.8	42.3	40.9	41.9	41.8	40.9		
Hats (except cloth and millinery).....	36.7	34.7	35.2	36.1	36.4	37.5	34.6	34.7	35.1	37.3	35.5	36.8	36.9	36.3	35.6		
Miscellaneous textile goods.....	40.3	39.9	40.2	40.8	41.1	41.5	39.5	40.5	40.5	40.7	40.9	41.0	40.6	40.5	39.4		
Apparel and other finished textile products.....	36.3	35.1	35.8	36.2	36.0	36.5	36.7	36.2	36.4	37.4	36.8	36.7	36.6	36.6	35.4		
Men's and boys' suits and coats.....	38.6	37.0	37.4	38.2	37.9	38.6	38.0	37.5	37.5	38.2	37.1	37.3	37.2	37.2	34.3		
Men's and boys' furnishings and work clothing.....	37.0	36.1	35.6	36.8	36.8	37.5	37.9	37.9	38.1	38.8	38.2	38.3	37.5	37.8	36.0		
Women's outerwear.....	34.5	33.0	34.5	34.4	33.8	34.1	34.0	32.8	33.3	35.4	35.0	34.1	35.3	34.6	34.1		
Women's, children's undergarments.....	35.8	34.5	35.5	36.3	36.4	36.8	37.6	37.4	36.8	37.6	36.3	36.8	36.2	36.9	35.2		
Millinery.....	30.3	29.7	35.9	37.0	34.8	33.6	31.9	32.6	34.7	36.3	34.4	31.7	29.6	34.2	35.0		
Children's outerwear.....	36.3	34.6	35.9	36.7	36.8	36.1	37.3	35.9	35.6	36.6	37.6	37.2	36.7	36.5	36.4		
Miscellaneous apparel and accessories.....	36.3	35.6	36.1	36.4	36.5	37.0	37.0	36.8	37.0	37.9	37.3	37.3	36.4	37.0	36.6		
Other fabricated textile products.....	38.3	36.9	38.1	37.5	37.6	38.2	38.4	38.4	38.3	38.4	38.0	38.3	38.1	38.2	37.4		
Average hourly earnings																	
Textile-mill products.....	\$1.63	\$1.61	\$1.62	\$1.60	\$1.60	\$1.59	\$1.59	\$1.59	\$1.59	\$1.59	\$1.58	\$1.58	\$1.58	\$1.57	\$1.51		
Scouring and combing plants.....	1.75	1.72	1.72	1.70	1.70	1.70	1.75	1.73	1.77	1.71	1.72	1.72	1.71	1.71	1.60		
Yarn and thread mills.....	1.52	1.51	1.51	1.50	1.49	1.49	1.49	1.49	1.50	1.49	1.49	1.49	1.49	1.47	1.40		
Broad-woven fabric mills.....	1.62	1.60	1.60	1.56	1.56	1.56	1.56	1.56	1.57	1.56	1.55	1.55	1.55	1.54	1.45		
Narrow fabrics and smallwares.....	1.65	1.64	1.65	1.64	1.63	1.64	1.64	1.64	1.63	1.62	1.61	1.61	1.61	1.61	1.54		
Knitting mills.....	1.52	1.50	1.52	1.51	1.51	1.49	1.49	1.49	1.50	1.49	1.48	1.49	1.49	1.49	1.46		
Dyeing and finishing textiles.....	1.78	1.76	1.75	1.73	1.73	1.74	1.73	1.73	1.72	1.72	1.71	1.73	1.72	1.71	1.65		
Carpets, rugs, other floor coverings.....	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.95	1.89		
Hats (except cloth and millinery).....	1.68	1.69	1.69	1.65	1.71	1.68	1.67	1.65	1.71	1.74	1.70	1.71	1.70	1.70	1.65		
Miscellaneous textile goods.....	1.88	1.84	1.85	1.87	1.88	1.86	1.84	1.84	1.84	1.89	1.82	1.83	1.82	1.82	1.78		
Apparel and other finished textile products.....	1.54	1.53	1.56	1.55	1.54	1.53	1.53	1.52	1.53	1.52	1.51	1.50	1.52	1.52	1.51		
Men's and boys' suits and coats.....	1.80	1.77	1.79	1.78	1.77	1.77	1.79	1.77	1.78	1.77	1.73	1.76	1.77	1.76	1.76		
Men's and boys' furnishings and work clothing.....	1.32	1.31	1.33	1.32	1.32	1.31	1.31	1.30	1.31	1.28	1.28	1.28	1.29	1.29	1.25		
Women's outerwear.....	1.70	1.70	1.73	1.74	1.72	1.73	1.72	1.70	1.73	1.73	1.72	1.68	1.70	1.72	1.69		
Women's, children's undergarments.....	1.43	1.42	1.42	1.41	1.40	1.40	1.41	1.40	1.40	1.38	1.38	1.39	1.40	1.39	1.37		
Millinery.....	1.85	1.84	1.87	1.92	1.87	1.81	1.84	1.86	1.94	1.89	1.87	1.78	1.76	1.84	1.83		
Children's outerwear.....	1.43	1.41	1.44	1.43	1.43	1.40	1.40	1.40	1.41	1.40	1.41	1.40	1.39	1.40	1.38		
Miscellaneous apparel and accessories.....	1.44	1.44	1.46	1.44	1.43	1.43	1.43	1.43	1.43	1.42	1.41	1.42	1.42	1.42	1.41		
Other fabricated textile products.....	1.61	1.59	1.60	1.61	1.59	1.57	1.55	1.56	1.56	1.53	1.56	1.57	1.56	1.56	1.52		

See footnotes at end of table.



TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1969										Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
<b>Manufacturing—Continued</b>																	
<b>Average weekly earnings</b>																	
<b>Nondurable goods—Continued</b>																	
Paper and allied products.....	\$95.60	\$93.63	\$94.30	\$94.73	\$95.20	\$95.22	\$95.22	\$95.67	\$96.77	\$95.68	\$96.03	\$94.60	\$93.22	\$94.16	\$88.83		
Pulp, paper, and paperboard mills.....	104.40	102.15	103.29	103.97	104.24	104.48	104.72	104.48	106.32	104.08	104.78	102.75	101.64	102.73	96.10		
Paperboard containers and boxes.....	87.91	86.43	86.03	86.67	87.74	88.93	88.20	89.68	90.95	90.81	87.78	87.09	87.57	87.78	82.41		
Other paper and allied products.....	85.90	84.26	84.87	84.05	84.67	85.07	83.64	83.94	84.03	83.00	83.00	83.40	83.20	83.42	75.90		
Printing, publishing, and allied industries.....	106.09	103.95	105.05	104.12	104.56	106.89	103.79	104.83	106.70	103.79	103.52	102.87	102.11	103.41	97.90		
Newspapers.....	112.99	110.05	108.72	108.42	107.45	113.31	107.76	110.00	111.96	108.32	108.02	108.63	108.22	108.28	103.43		
Periodicals.....	113.96	115.30	116.57	111.20	111.35	108.93	113.96	119.83	132.30	119.83	114.29	108.67	106.50	113.15	102.97		
Books.....	94.25	91.66	91.43	89.44	91.14	92.57	90.29	91.31	92.23	93.61	95.28	90.63	90.00	90.52	85.80		
Commercial printing.....	104.79	103.33	105.86	103.35	105.34	106.92	104.26	104.67	106.00	102.05	102.83	101.52	100.41	102.96	97.23		
Lithographing.....	110.55	106.23	109.20	107.96	107.73	109.59	107.19	108.67	109.60	108.13	108.63	106.26	104.41	106.40	98.81		
Greeting cards.....	73.15	70.48	73.54	76.63	75.08	70.10	70.25	69.72	68.60	68.40	69.50	70.02	69.00	70.07	67.03		
Bookbinding and related industries.....	81.20	79.92	82.01	81.20	81.79	83.28	81.66	80.43	81.09	81.12	81.33	80.11	79.28	80.50	74.96		
Miscellaneous publishing and printing services.....	115.29	115.06	117.35	118.81	118.50	118.78	117.18	114.98	117.34	116.10	116.43	115.28	116.70	116.19	110.75		
<b>Average weekly hours</b>																	
Paper and allied products.....	42.3	41.8	42.1	42.1	42.5	42.7	42.7	42.9	43.2	43.1	43.0	43.0	42.9	42.8	41.9		
Pulp, paper, and paperboard mills.....	43.5	43.1	43.4	43.5	43.8	43.9	44.0	43.9	44.3	44.1	44.4	44.1	44.0	43.9	42.9		
Paperboard containers and boxes.....	40.7	40.2	40.2	40.5	41.0	41.2	41.8	42.3	42.5	42.6	41.8	41.9	41.9	41.8	41.0		
Other paper and allied products.....	41.7	41.1	41.4	41.0	41.3	41.7	41.2	41.3	41.6	41.5	41.5	41.7	41.6	41.5	40.7		
Printing, publishing, and allied industries.....	38.3	37.8	38.2	38.0	38.3	39.0	38.3	38.4	38.8	38.3	38.2	38.1	38.1	38.3	37.8		
Newspapers.....	36.1	35.5	35.3	35.2	35.0	36.2	35.1	35.6	36.0	35.4	35.3	35.6	35.6	35.5	35.3		
Periodicals.....	40.7	40.6	40.9	40.0	40.2	39.9	40.7	41.9	44.1	41.9	41.0	40.1	39.3	40.7	39.3		
Books.....	40.8	40.2	40.1	39.4	39.8	40.6	39.6	39.7	40.1	40.7	39.4	39.4	39.3	39.7	39.0		
Commercial printing.....	39.1	38.7	39.5	39.0	39.9	40.5	39.8	39.8	40.0	39.1	39.4	39.2	39.3	39.6	39.2		
Lithographing.....	40.2	39.2	40.0	39.8	39.9	40.7	39.7	40.1	40.0	39.9	39.9	39.5	39.4	39.7	38.9		
Greeting cards.....	38.1	36.9	38.3	38.7	38.5	38.1	38.6	38.1	37.9	38.0	38.4	38.9	38.4	38.5	38.3		
Bookbinding and related industries.....	38.3	37.7	38.5	38.3	38.4	39.1	38.7	38.3	38.8	39.0	39.1	38.7	38.3	38.7	38.0		
Miscellaneous publishing and printing services.....	37.8	37.6	38.1	38.7	38.6	39.2	38.8	38.2	38.6	38.7	38.3	38.3	38.9	38.6	37.8		
<b>Average hourly earnings</b>																	
Paper and allied products.....	\$2.26	\$2.24	\$2.24	\$2.25	\$2.24	\$2.23	\$2.23	\$2.23	\$2.24	\$2.22	\$2.21	\$2.20	\$2.18	\$2.20	\$2.13		
Pulp, paper, and paperboard mills.....	2.40	2.37	2.38	2.39	2.38	2.38	2.38	2.38	2.40	2.36	2.36	2.33	2.31	2.34	2.24		
Paperboard containers and boxes.....	2.16	2.15	2.14	2.14	2.14	2.11	2.11	2.12	2.14	2.12	2.10	2.10	2.09	2.10	2.01		
Other paper and allied products.....	2.06	2.05	2.05	2.05	2.06	2.04	2.03	2.03	2.02	2.00	2.00	2.00	2.00	2.01	1.94		
Printing, publishing, and allied industries.....	2.77	2.75	2.75	2.74	2.73	2.74	2.71	2.73	2.75	2.71	2.71	2.70	2.68	2.70	2.59		
Newspapers.....	2.13	2.10	2.08	2.08	2.07	2.13	2.07	2.09	2.11	2.06	2.06	2.06	2.04	2.05	2.03		
Periodicals.....	2.80	2.84	2.85	2.78	2.77	2.73	2.80	2.86	3.00	2.86	2.79	2.71	2.71	2.78	2.62		
Books.....	2.31	2.28	2.28	2.27	2.29	2.26	2.28	2.30	2.30	2.30	2.29	2.30	2.29	2.28	2.20		
Commercial printing.....	2.68	2.67	2.68	2.65	2.64	2.64	2.62	2.63	2.65	2.61	2.61	2.60	2.56	2.60	2.48		
Lithographing.....	2.75	2.71	2.73	2.71	2.70	2.70	2.70	2.71	2.74	2.71	2.72	2.69	2.68	2.68	2.54		
Greeting cards.....	1.92	1.91	1.92	1.98	1.95	1.84	1.82	1.83	1.81	1.80	1.81	1.80	1.79	1.82	1.78		
Bookbinding and related industries.....	2.12	2.12	2.13	2.12	2.13	2.13	2.11	2.10	2.09	2.08	2.08	2.07	2.07	2.08	1.97		
Miscellaneous publishing and printing services.....	3.05	3.06	3.08	3.07	3.07	3.03	3.02	3.01	3.04	3.00	3.04	3.01	3.00	3.01	2.98		

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959								Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958
Average weekly earnings															
<b>Manufacturing—Continued</b>															
<i>Nondurable goods—Continued</i>															
Chemicals and allied products.....	\$103.58	\$104.41	\$102.01	\$101.60	\$101.60	\$102.66	\$101.75	\$101.00	\$104.48	\$100.53	\$100.28	\$100.43	\$99.42	\$100.02	\$94.48
Industrial inorganic chemicals.....	114.53	117.45	113.02	112.75	112.61	114.93	113.55	113.97	117.87	111.24	111.64	111.27	110.27	111.64	104.70
Industrial organic chemicals.....	110.51	112.29	108.62	108.21	108.21	108.78	108.58	108.05	112.80	106.45	106.96	106.91	105.33	106.81	100.04
Drugs and medicines.....	93.73	92.75	92.97	93.66	92.62	92.68	93.11	93.11	94.39	89.06	89.28	90.17	89.51	90.58	83.88
Soap, cleaning and polishing preparations.....	111.90	108.24	111.72	109.15	107.94	109.36	108.16	108.58	110.30	107.49	103.17	104.55	103.38	105.47	100.86
Paints, pigments, and fillers.....	102.41	101.19	98.90	98.42	98.01	98.33	96.22	96.32	101.40	96.29	98.36	98.88	100.01	98.29	93.25
Gum and wood chemicals.....	87.74	86.29	84.20	84.00	82.60	84.77	87.90	82.54	86.86	84.20	95.40	84.40	84.35	83.36	90.45
Fertilizers.....	79.42	85.44	74.07	77.96	78.75	78.57	76.44	75.48	80.70	77.46	75.26	78.38	81.90	78.12	74.03
Vegetable and animal oils and fats.....	89.23	87.23	87.96	86.29	87.30	86.48	87.23	85.84	87.32	87.00	87.03	87.20	85.34	85.44	82.21
Miscellaneous chemicals.....	95.71	95.71	94.89	93.96	93.96	94.28	95.45	92.39	92.21	91.19	91.76	92.53	91.62	91.58	87.02
Products of petroleum and coal.....	117.62	119.54	116.87	116.87	116.98	117.74	118.90	117.50	120.77	116.12	118.78	117.75	117.67	117.38	110.97
Petroleum refining.....	122.40	124.23	120.20	120.60	120.40	121.80	124.01	119.80	124.53	118.50	121.80	120.39	121.58	121.29	114.90
Coke, other petroleum and coal products.....	102.51	105.44	106.49	105.97	106.00	108.30	108.17	108.08	108.26	108.03	109.48	108.29	105.41	105.83	97.28
Rubber products.....	100.80	94.60	97.71	100.00	102.16	101.59	97.66	101.18	102.01	105.33	107.10	108.74	101.46	101.60	92.59
Tires and inner tubes.....	118.40	107.38	113.68	117.71	119.80	118.59	112.62	117.49	117.56	127.74	128.74	108.93	126.13	120.01	106.04
Rubber footwear.....	81.40	77.01	78.61	77.21	79.40	80.79	79.80	79.40	79.18	79.17	78.60	81.54	79.58	79.19	76.82
Other rubber products.....	90.87	88.43	89.78	91.76	93.52	92.93	90.87	93.38	94.73	93.21	95.40	94.98	92.18	92.90	84.59
Average weekly hours															
Chemicals and allied products.....	41.6	42.1	41.3	41.3	41.3	41.9	41.7	41.6	42.3	41.2	41.1	41.5	41.6	41.5	40.9
Industrial inorganic chemicals.....	41.8	42.4	41.4	41.3	41.4	42.1	41.9	41.9	42.4	41.2	41.5	41.5	41.3	41.5	40.9
Industrial organic chemicals.....	41.7	41.9	41.3	41.3	41.3	41.9	41.6	41.4	42.6	41.1	41.1	41.6	41.5	41.4	40.5
Drugs and medicines.....	40.4	40.5	40.6	40.9	40.8	41.0	41.2	41.2	41.4	40.3	40.4	40.8	40.5	40.8	40.7
Soap, cleaning and polishing preparations.....	41.6	41.0	42.0	41.5	41.2	41.9	41.6	41.6	42.1	41.5	40.3	41.0	40.7	41.2	41.0
Paints, pigments, and fillers.....	41.8	41.3	40.7	40.5	40.5	40.8	41.0	40.3	41.9	41.5	41.5	41.9	42.2	41.3	40.9
Gum and wood chemicals.....	42.8	42.3	42.1	42.0	41.3	42.8	43.3	41.9	43.0	42.1	42.7	42.2	42.6	42.1	41.9
Fertilizers.....	42.7	45.0	40.7	42.6	42.8	42.7	42.0	41.7	42.7	42.1	40.9	42.6	45.0	43.4	42.3
Vegetable and animal oils and fats.....	42.9	43.4	44.2	43.8	45.0	46.0	46.4	46.4	46.2	43.5	43.3	43.6	43.1	44.5	44.2
Miscellaneous chemicals.....	40.9	40.9	40.9	40.5	40.5	40.8	40.8	40.7	40.8	40.5	40.6	40.9	40.9	40.7	40.1
Products of petroleum and coal.....	40.7	40.8	40.3	40.3	40.2	40.6	41.0	40.8	41.5	40.6	41.1	40.9	41.0	40.9	40.5
Petroleum refining.....	40.8	41.0	40.2	40.2	40.0	40.6	41.2	40.2	41.1	39.9	40.6	40.4	40.8	40.7	40.6
Coke, other petroleum and coal products.....	40.2	40.4	40.8	40.6	40.8	40.5	40.3	42.7	42.6	42.7	42.6	42.3	41.5	41.5	40.2
Rubber products.....	40.0	38.3	39.4	40.0	40.7	40.8	39.7	40.8	41.3	42.3	42.5	40.3	42.1	41.3	39.4
Tires and inner tubes.....	40.0	36.9	38.8	39.5	40.2	40.2	38.7	40.1	40.4	43.3	43.2	36.8	42.9	41.1	38.7
Rubber footwear.....	40.1	38.7	39.5	38.8	39.5	39.8	39.9	39.9	40.4	40.6	40.1	41.2	40.6	40.2	39.7
Other rubber products.....	39.9	39.3	39.9	40.6	41.2	41.3	40.3	41.5	42.1	41.8	42.4	42.4	41.9	41.7	39.9
Average hourly earnings															
Chemicals and allied products.....	\$2.49	\$2.48	\$2.47	\$2.46	\$2.45	\$2.45	\$2.44	\$2.43	\$2.47	\$2.44	\$2.44	\$2.42	\$2.39	\$2.41	\$2.31
Industrial inorganic chemicals.....	2.74	2.77	2.73	2.73	2.72	2.73	2.71	2.72	2.78	2.70	2.69	2.65	2.67	2.66	2.56
Industrial organic chemicals.....	2.65	2.68	2.63	2.62	2.62	2.62	2.61	2.61	2.65	2.59	2.60	2.57	2.55	2.58	2.47
Drugs and medicines.....	2.32	2.29	2.29	2.29	2.27	2.26	2.26	2.26	2.28	2.21	2.21	2.21	2.21	2.22	2.11
Soap, cleaning and polishing preparations.....	2.69	2.64	2.66	2.63	2.62	2.61	2.60	2.61	2.62	2.59	2.56	2.55	2.54	2.56	2.46
Paints, pigments, and fillers.....	2.45	2.45	2.43	2.43	2.42	2.41	2.42	2.39	2.42	2.38	2.37	2.36	2.37	2.38	2.28
Gum and wood chemicals.....	2.05	2.04	2.00	2.00	2.00	1.99	2.03	1.97	2.02	2.00	2.00	2.00	1.98	1.98	1.92
Fertilizers.....	1.86	1.78	1.82	1.83	1.84	1.84	1.82	1.81	1.89	1.84	1.84	1.84	1.82	1.80	1.75
Vegetable and animal oils and fats.....	2.08	2.01	1.99	1.97	1.94	1.88	1.88	1.85	1.89	2.00	2.01	2.00	1.98	1.92	1.86
Miscellaneous chemicals.....	2.34	2.34	2.32	2.32	2.32	2.31	2.29	2.27	2.26	2.25	2.25	2.25	2.24	2.25	2.17
Products of petroleum and coal.....	2.89	2.93	2.90	2.90	2.91	2.90	2.90	2.88	2.91	2.86	2.89	2.88	2.87	2.87	2.74
Petroleum refining.....	3.00	3.03	2.99	3.00	3.01	3.00	3.01	2.98	3.03	2.97	3.00	2.98	2.96	2.98	2.83
Coke, other petroleum and coal products.....	2.55	2.61	2.61	2.61	2.62	2.60	2.56	2.53	2.54	2.53	2.57	2.56	2.54	2.55	2.42
Rubber products.....	2.32	2.47	2.46	2.50	2.51	2.49	2.46	2.48	2.47	2.49	2.52	2.45	2.41	2.46	2.35
Tires and inner tubes.....	2.96	2.91	2.93	2.98	2.98	2.95	2.91	2.93	2.91	2.95	2.98	2.96	2.94	2.92	2.74
Rubber footwear.....	2.03	1.99	1.99	1.99	2.01	2.03	2.00	1.99	1.96	1.95	1.96	1.96	1.94	1.97	1.93
Other rubber products.....	2.27	2.25	2.25	2.26	2.27	2.25	2.23	2.25	2.25	2.25	2.25	2.24	2.20	2.23	2.12

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959										Annual average	
	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958		
Average weekly earnings																	
<b>Manufacturing—Continued</b>																	
<i>Nondurable goods—Continued</i>																	
Leather and leather products.....	\$59.90	\$58.06	\$60.84	\$60.64	\$61.78	\$61.07	\$60.43	\$58.28	\$59.09	\$60.48	\$60.90	\$61.50	\$60.54	\$60.70	\$57.78		
Leather: tanned, curried, and finished.....	83.07	81.66	81.87	81.24	81.30	82.74	81.09	80.50	80.11	80.82	79.70	80.94	81.56	80.94	78.39		
Industrial leather belting and packing.....	77.03	73.53	76.24	72.13	74.68	79.80	69.50	72.38	77.42	80.19	79.56	83.38	82.74	79.56	76.63		
Boot and shoe cut stock and findings.....	58.25	55.22	57.82	58.44	60.30	59.53	54.21	54.42	55.55	57.30	58.05	58.74	57.91	57.30	56.02		
Footwear (except rubber).....	56.96	55.52	58.56	58.67	60.10	58.40	57.46	55.69	56.47	58.50	59.21	59.44	58.63	58.34	54.87		
Luggage.....	64.90	62.87	63.63	62.29	62.87	63.54	60.70	63.50	64.19	64.85	65.11	65.63	65.02	65.18	63.46		
Handbags and small leather goods.....	57.68	53.61	58.05	57.30	56.92	58.65	59.60	54.24	55.24	56.74	56.60	54.54	53.87	56.45	55.54		
Gloves and miscellaneous leather goods.....	52.56	51.41	52.20	52.42	50.98	53.11	53.71	62.77	51.41	52.88	61.61	51.66	50.92	51.69	50.40		
<b>Transportation and public utilities:</b>																	
Transportation:																	
Interstate railroads:																	
Class I railroads <sup>1</sup> .....	107.33	107.33	109.82	111.45	106.60	110.00	106.86	105.25	106.17	103.38	107.35	106.28	104.60	106.43	101.50		
Local railroads and buslines.....	98.90	97.78	97.78	97.33	95.60	96.10	95.44	94.57	94.33	95.68	95.47	95.92	95.04	94.59	90.92		
Communication:																	
Telephone.....	88.03	86.36	87.58	87.42	86.14	87.42	89.95	88.58	89.22	85.85	86.29	86.02	84.20	85.46	78.72		
Telegraph.....	97.75	95.30	95.30	94.43	95.30	95.63	95.53	95.57	100.11	97.13	95.79	96.64	97.33	95.99	90.06		
Other public utilities:																	
Gas and electric utilities.....	109.34	108.94	108.26	107.59	108.39	107.98	109.03	108.62	107.79	105.63	106.04	105.37	103.68	105.78	100.37		
Electric light and power utilities.....	109.34	108.79	108.94	107.89	108.39	107.71	108.65	108.24	108.36	107.16	107.53	106.60	104.60	106.34	101.43		
Gas utilities.....	101.66	101.25	100.85	99.85	100.85	101.18	103.91	103.17	102.34	99.06	98.74	98.40	97.81	99.39	94.83		
Electric light and gas utilities combined.....	116.18	115.62	113.96	114.52	114.67	114.12	114.13	113.44	112.06	110.00	110.42	110.54	107.07	110.56	103.69		
<b>Manufacturing—Continued</b>																	
<i>Nondurable goods—Continued</i>																	
Leather and leather products.....	36.3	35.4	37.1	37.2	37.9	37.7	37.3	36.2	36.7	37.8	36.3	38.2	37.6	37.7	36.8		
Leather: tanned, curried, and finished.....	39.0	38.7	38.8	38.5	38.9	39.4	38.8	38.7	38.7	38.0	38.5	39.1	39.4	39.1	39.0		
Industrial leather belting and packing.....	39.1	38.1	38.7	36.8	38.1	40.1	36.2	37.5	39.5	40.5	40.8	41.9	42.0	40.8	39.7		
Boot and shoe cut stock and findings.....	37.1	35.4	37.3	37.7	38.9	38.6	36.5	35.8	36.5	37.7	38.7	38.9	38.1	37.7	37.1		
Footwear (except rubber).....	35.6	34.7	36.6	36.9	37.8	37.2	36.6	35.7	36.2	37.5	38.2	38.1	37.2	37.4	36.1		
Luggage.....	38.4	37.2	38.1	37.3	37.2	37.6	41.0	37.8	38.6	39.3	39.7	39.5	38.7	38.8	38.0		
Handbags and small leather goods.....	37.7	35.5	38.7	38.2	38.2	39.1	40.0	36.4	38.0	38.6	38.6	37.1	36.9	38.4	38.3		
Gloves and miscellaneous leather goods.....	36.0	35.7	36.0	36.4	35.9	37.4	37.3	36.9	36.7	37.5	36.6	36.9	36.9	36.8	36.0		
<b>Transportation and public utilities:</b>																	
Transportation:																	
Interstate railroads:																	
Class I railroads <sup>1</sup> .....	41.6	42.9	42.7	42.7	41.0	42.8	41.1	42.6	41.8	40.7	42.6	42.8	41.3	41.9	41.6		
Local railroads and buslines.....	43.0	42.7	42.7	42.5	42.3	42.9	42.8	42.6	42.3	43.1	43.2	43.6	43.2	42.8	42.7		
Communication:																	
Telephone.....	39.3	38.9	39.1	39.2	38.8	39.2	40.7	39.9	40.6	39.2	39.4	39.0	38.8	39.2	38.4		
Telegraph.....	42.5	41.8	41.8	41.6	41.8	41.9	41.9	42.1	44.1	42.6	42.2	42.2	42.5	42.1	41.5		
Other public utilities:																	
Gas and electric utilities.....	40.8	40.8	40.7	40.6	40.9	40.9	41.3	41.3	41.3	40.9	41.1	41.0	40.5	41.0	40.8		
Electric light and power utilities.....	40.8	40.9	40.8	40.7	40.9	40.8	41.0	41.0	41.2	40.9	41.2	41.0	40.7	40.9	40.9		
Gas utilities.....	40.3	40.5	40.5	40.1	40.5	40.5	41.4	41.6	41.6	40.6	40.8	40.7	40.5	40.9	40.7		
Electric light and gas utilities combined.....	41.2	41.0	40.7	40.9	41.1	41.2	41.5	41.4	41.2	41.2	41.2	41.4	40.1	41.1	40.8		
<b>Manufacturing—Continued</b>																	
<i>Nondurable goods—Continued</i>																	
Leather and leather products.....	\$1.65	\$1.64	\$1.64	\$1.63	\$1.63	\$1.62	\$1.62	\$1.61	\$1.61	\$1.60	\$1.59	\$1.61	\$1.61	\$1.61	\$1.57		
Leather: tanned, curried, and finished.....	2.13	2.11	2.11	2.11	2.09	2.10	2.09	2.08	2.07	2.07	2.07	2.07	2.07	2.07	2.01		
Industrial leather belting and packing.....	1.97	1.93	1.97	1.96	1.96	1.99	1.92	1.93	1.96	1.98	1.98	1.99	1.97	1.95	1.93		
Boot and shoe cut stock and findings.....	1.57	1.56	1.55	1.55	1.55	1.55	1.54	1.52	1.53	1.52	1.50	1.51	1.52	1.52	1.51		
Footwear (except rubber).....	1.60	1.60	1.60	1.59	1.59	1.57	1.57	1.56	1.56	1.56	1.55	1.56	1.56	1.56	1.52		
Luggage.....	1.69	1.69	1.67	1.67	1.69	1.69	1.70	1.68	1.65	1.65	1.64	1.67	1.68	1.68	1.67		
Handbags and small leather goods.....	1.53	1.51	1.50	1.50	1.49	1.50	1.49	1.49	1.48	1.47	1.47	1.47	1.46	1.47	1.48		
Gloves and miscellaneous leather goods.....	1.46	1.44	1.45	1.44	1.42	1.42	1.44	1.43	1.44	1.41	1.41	1.40	1.38	1.41	1.40		
<b>Transportation and public utilities:</b>																	
Transportation:																	
Interstate railroads:																	
Class I railroads <sup>1</sup> .....	2.58	2.56	2.61	2.60	2.57	2.60	2.53	2.54	2.54	2.59	2.53	2.54	2.54	2.44			
Local railroads and buslines.....	2.30	2.29	2.29	2.29	2.26	2.24	2.23	2.22	2.23	2.22	2.21	2.20	2.20	2.21	2.12		
Communication:																	
Telephone.....	2.24	2.22	2.24	2.23	2.22	2.23	2.21	2.22	2.20	2.19	2.19	2.18	2.17	2.18	2.08		
Telegraph.....	2.30	2.28	2.28	2.27	2.28	2.28	2.28	2.27	2.27	2.28	2.27	2.29	2.29	2.28	2.17		
Other public utilities:																	
Gas and electric utilities.....	2.68	2.67	2.66	2.65	2.65	2.64	2.64	2.63	2.61	2.59	2.58	2.57	2.56	2.58	2.46		
Electric light and power utilities.....	2.68	2.66	2.67	2.65	2.65	2.64	2.65	2.64	2.63	2.62	2.61	2.60	2.57	2.60	2.48		
Gas utilities.....	2.32	2.30	2.49	2.49	2.49	2.48	2.51	2.48	2.46	2.44	2.42	2.42	2.41	2.43	2.33		
Electric light and gas utilities combined.....	2.82	2.82	2.80	2.80	2.79	2.77	2.75	2.74	2.72	2.67	2.68	2.67	2.67	2.69	2.54		

See footnotes at end of table

TABLE C-1. Gross hours and earnings of production workers,<sup>1</sup> by industry—Continued

Industry	1960					1959										Annual average	
	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June <sup>3</sup>	May	1959	1958		
Average weekly earnings																	
<b>Wholesale and retail trade:</b>																	
Wholesale trade.....	\$92.46	\$91.83	\$91.37	\$90.35	\$90.80	\$91.94	\$91.71	\$91.53	\$91.94	\$91.53	\$91.76	\$91.13	\$90.27	\$90.27	\$87.02		
Retail trade (except eating and drinking places).....	67.69	67.48	66.95	66.95	66.95	66.09	66.38	67.11	67.82	68.32	68.68	67.79	66.70	67.06	64.77		
General merchandise stores.....	49.01	48.99	48.33	48.19	48.19	50.01	47.46	47.94	48.30	49.42	49.07	48.72	47.64	48.37	46.85		
Department stores and general mail-order houses.....	55.36	55.14	53.69	53.69	54.19	56.70	52.98	53.82	54.60	55.03	54.82	54.72	53.55	54.39	52.60		
Food and liquor stores.....	70.60	70.13	69.89	69.34	69.38	69.26	69.81	69.55	71.20	71.23	72.18	70.29	69.14	69.89	67.52		
Automotive and accessories dealers.....	90.67	91.73	88.91	87.40	88.04	86.29	88.71	89.76	87.40	89.12	90.20	90.41	89.12	88.24	83.22		
Apparel and accessories stores.....	51.56	53.48	50.85	51.64	51.87	53.35	51.83	51.34	52.29	52.54	52.65	52.55	51.79	51.90	50.81		
Other retail trade:																	
Furniture and appliance stores.....	75.11	75.44	74.80	75.44	76.67	79.80	77.46	76.18	77.42	77.79	77.15	75.95	75.12	75.76	72.31		
Lumber and hardware supply stores.....	81.87	81.64	79.49	78.28	78.09	79.99	80.22	81.79	80.79	81.94	81.70	80.70	80.81	79.95	77.04		
<b>Finance, insurance, and real estate:</b>																	
Banks and trust companies <sup>4</sup> .....	70.13	69.94	69.56	69.94	69.93	68.81	68.26	68.81	68.26	68.07	68.06	67.60	68.25	68.07	66.57		
Security dealers and exchanges.....	111.37	113.61	112.67	114.52	115.49	117.14	110.15	109.43	107.22	114.84	120.43	123.72	126.01	119.24	106.88		
Insurance carriers.....	88.04	87.37	87.68	87.54	87.26	86.62	86.32	85.79	85.96	86.59	86.57	85.91	85.24	85.79	82.97		
<b>Service and miscellaneous:</b>																	
Hotels and lodging places:																	
Hotels, year-round <sup>5</sup> .....	48.40	47.52	48.00	47.64	48.12	48.40	48.24	48.20	48.36	47.91	47.44	47.83	46.92	47.44	45.20		
Personal services:																	
Laundries.....	48.16	48.00	46.68	46.92	47.04	47.24	46.37	46.96	46.96	46.33	46.22	46.92	47.27	46.45	44.30		
Cleaning and dyeing plants.....	55.41	57.94	52.68	52.40	53.10	54.91	54.35	55.60	53.54	51.65	51.92	54.79	55.48	53.29	50.82		
Motion pictures:																	
Motion-picture production and distribution.....	113.83	107.96	107.23	112.13	111.63	112.89	114.31	114.51	110.97	114.98	108.26	103.15	104.80	108.36	98.65		
Average weekly hours																	
<b>Wholesale and retail trade:</b>																	
Wholesale trade.....	40.2	40.1	39.9	39.8	40.0	40.5	40.4	40.5	40.5	40.5	40.6	40.5	40.3	40.3	40.1		
Retail trade (except eating and drinking places).....	37.4	37.7	37.4	37.4	37.4	38.2	37.5	37.7	38.1	38.6	38.8	38.3	37.9	38.1	38.1		
General merchandise stores.....	33.8	34.5	33.8	33.7	33.7	36.5	33.9	34.0	34.4	35.3	35.3	34.8	34.2	34.8	34.7		
Department stores and general mail-order houses.....	34.6	34.9	34.2	34.2	34.3	37.3	34.4	34.5	35.0	35.5	35.6	35.3	35.0	35.2	35.3		
Food and liquor stores.....	35.3	35.6	35.3	35.2	35.4	35.7	35.8	35.9	36.7	37.1	37.4	36.8	36.2	36.4	36.3		
Automotive and accessories dealers.....	43.8	44.1	43.8	43.7	43.8	43.8	43.7	44.0	43.7	43.9	44.0	44.1	43.9	43.9	43.8		
Apparel and accessories stores.....	33.7	34.5	33.9	34.2	33.9	35.1	34.1	34.0	34.4	35.8	35.1	34.8	34.3	34.6	34.8		
Other retail trade:																	
Furniture and appliance stores.....	40.6	41.0	41.1	41.0	41.0	42.0	41.2	41.4	41.4	41.6	41.7	41.5	41.5	41.4	41.8		
Lumber and hardware supply stores.....	42.2	42.3	41.4	41.2	41.1	42.1	42.0	42.6	42.3	42.9	43.0	42.7	42.6	42.3	42.1		
<b>Finance, insurance, and real estate:</b>																	
Banks and trust companies <sup>4</sup> .....	37.5	37.4	37.4	37.4	37.8	37.6	37.3	37.6	37.3	37.4	37.6	37.4	37.5	37.4	37.4		
Security dealers and exchanges.....																	
Insurance carriers.....																	
<b>Service and miscellaneous:</b>																	
Hotels and lodging places:																	
Hotels, year-round <sup>5</sup> .....	40.0	39.6	40.0	39.7	40.1	40.0	40.2	40.5	40.3	40.6	40.2	40.1	40.1	40.2	40.0		
Personal services:																	
Laundries.....	39.8	40.0	38.9	39.1	39.2	39.7	39.3	39.8	39.8	39.6	39.5	40.1	40.4	39.7	39.2		
Cleaning and dyeing plants.....	39.3	40.8	37.9	37.7	38.2	39.5	39.1	40.0	38.8	37.7	37.9	39.7	40.2	38.9	38.5		
Motion pictures:																	
Motion-picture production and distribution.....																	
Average hourly earnings																	
<b>Wholesale and retail trade:</b>																	
Wholesale trade.....	\$2.30	\$2.29	\$2.29	\$2.27	\$2.27	\$2.27	\$2.27	\$2.26	\$2.26	\$2.26	\$2.25	\$2.24	\$2.24	\$2.24	\$2.17		
Retail trade (except eating and drinking places).....	1.81	1.79	1.79	1.79	1.79	1.78	1.77	1.78	1.78	1.77	1.77	1.77	1.76	1.76	1.70		
General merchandise stores.....	1.45	1.42	1.43	1.43	1.43	1.37	1.40	1.41	1.41	1.40	1.39	1.40	1.39	1.39	1.35		
Department stores and general mail-order houses.....	1.60	1.58	1.57	1.57	1.58	1.52	1.54	1.56	1.56	1.55	1.54	1.55	1.53	1.54	1.49		
Food and liquor stores.....	2.00	1.97	1.98	1.97	1.96	1.94	1.95	1.94	1.94	1.92	1.93	1.91	1.91	1.92	1.86		
Automotive and accessories dealers.....	2.07	2.08	2.03	2.00	2.01	1.97	2.03	2.04	2.00	2.03	2.05	2.05	2.03	2.01	1.90		
Apparel and accessories stores.....	1.53	1.55	1.50	1.51	1.53	1.52	1.52	1.51	1.52	1.48	1.50	1.51	1.51	1.50	1.46		
Other retail trade:																	
Furniture and appliance stores.....	1.85	1.84	1.82	1.84	1.87	1.90	1.88	1.84	1.87	1.87	1.85	1.83	1.81	1.83	1.73		
Lumber and hardware supply stores.....	1.94	1.93	1.92	1.90	1.90	1.90	1.91	1.92	1.91	1.91	1.90	1.89	1.89	1.89	1.83		
<b>Finance, insurance, and real estate:</b>																	
Banks and trust companies <sup>4</sup> .....	1.87	1.87	1.86	1.87	1.85	1.83	1.83	1.83	1.83	1.82	1.81	1.81	1.82	1.82	1.78		
Security dealers and exchanges.....																	
Insurance carriers.....																	
<b>Service and miscellaneous:</b>																	
Hotels and lodging places:																	
Hotels, year-round <sup>5</sup> .....	1.21	1.20	1.20	1.20	1.20	1.21	1.20	1.19	1.20	1.18	1.18	1.18	1.17	1.18	1.13		
Personal services:																	
Laundries.....	1.21	1.20	1.20	1.20	1.20	1.19	1.18	1.18	1.18	1.17	1.17	1.17	1.17	1.17	1.13		
Cleaning and dyeing plants.....	1.41	1.42	1.39	1.39	1.39	1.39	1.39	1.39	1.38	1.37	1.37	1.38	1.38	1.37	1.32		
Motion pictures:																	
Motion-picture production and distribution.....																	

<sup>1</sup> For comparability of data with those published in issues prior to August 1958 and coverage of these series, see footnote 1, table A-2.

In addition, hours and earnings data for anthracite mining have been revised from January 1953 and are not comparable with those published in issues prior to August 1958.

For mining, manufacturing, laundries, and cleaning and dyeing plants, data refer to production and related workers; for contract construction, to construction workers; and for the remaining industries, unless otherwise noted, to nonsupervisory workers and working supervisors.

<sup>2</sup> Preliminary.

<sup>3</sup> Figures for Class I railroads (excluding switching and terminal companies) are based upon monthly data summarized in the M-300 report by the Interstate Commerce Commission and relate to all employees who received pay during the month, except executives, officials, and staff assistants (ICC Group I).

<sup>4</sup> Data relate to domestic nonsupervisory employees except messengers.

<sup>5</sup> Average weekly earnings have been revised beginning with January 1958 and are not strictly comparable with data for earlier years. Average weekly hours and average hourly earnings are new series, available from January 1958.

<sup>6</sup> Money payments only; additional value of board, room, uniforms, and tips not included.

Source: U.S. Department of Labor, Bureau of Labor Statistics for all series except that for Class I railroads (see footnote 3).



TABLE C-2. Average overtime hours and average hourly earnings excluding overtime of production workers in manufacturing, by major industry group<sup>1</sup>

Major industry group	1960					1969								Annual average	
	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1968
	Average overtime hours <sup>3</sup>														
Manufacturing.....	2.4	2.1	2.5	2.6	2.8	2.7	2.6	2.8	3.0	2.9	2.7	2.9	2.7	2.7	2.0
Durable goods.....	2.4	2.1	2.5	2.7	2.9	2.7	2.5	2.8	3.0	3.0	2.7	3.0	2.8	2.7	1.9
Ordnance and accessories.....	1.9	1.6	2.0	2.3	2.1	2.2	2.1	2.1	2.3	2.1	2.1	2.2	2.1	2.1	2.0
Lumber and wood products.....	3.4	2.9	2.8	2.8	2.9	3.0	3.2	3.5	3.6	4.1	3.6	3.7	3.7	3.4	2.9
Furniture and fixtures.....	2.4	2.4	2.4	2.6	2.7	3.5	3.2	3.5	3.2	3.3	2.8	2.7	2.4	2.9	2.1
Stone, clay, and glass products.....	3.1	2.8	2.7	2.8	2.9	3.0	3.2	3.4	3.6	3.9	3.6	3.6	3.8	3.4	2.8
Primary metal industries.....	1.5	2.0	2.1	2.4	2.8	2.6	2.3	2.6	3.0	2.6	2.4	3.1	2.9	2.6	1.3
Fabricated metal products.....	2.6	2.1	2.5	2.7	3.2	3.0	2.3	2.9	3.6	3.4	3.0	3.3	3.0	2.9	2.1
Machinery (except electrical).....	2.7	2.4	2.8	2.9	2.8	2.9	2.5	2.7	2.8	2.8	2.9	3.2	3.0	2.7	1.7
Electrical machinery.....	1.7	1.2	1.9	2.0	2.4	2.4	2.2	2.5	2.6	2.4	2.1	2.3	2.1	2.2	1.8
Transportation equipment.....	2.4	1.9	2.8	3.2	3.8	2.5	1.9	2.5	4.7	2.7	2.6	2.8	2.6	2.5	1.9
Instruments and related products.....	2.0	1.7	2.3	2.3	2.2	2.7	2.6	2.5	2.4	2.3	2.4	2.2	2.0	2.3	1.9
Miscellaneous manufacturing.....	2.2	1.9	2.4	2.5	2.4	2.7	2.7	3.1	3.0	2.7	2.4	2.7	2.8	2.6	2.1
Nondurable goods.....	2.5	2.2	2.4	2.5	2.6	2.7	2.7	2.8	3.0	2.9	2.8	2.7	2.6	2.7	2.2
Food and kindred products.....	3.1	2.8	2.9	2.8	3.3	3.4	3.6	3.6	4.0	3.3	3.4	3.4	3.2	3.3	3.0
Tobacco manufactures.....	1.0	.7	.5	.6	1.3	1.1	1.0	1.3	1.6	1.7	1.8	1.5	1.2	1.2	1.3
Textile-mill products.....	2.8	2.5	3.0	3.0	3.0	3.2	3.2	3.2	3.1	3.3	3.1	3.3	3.0	3.1	2.1
Apparel and other finished textile products.....	1.4	1.0	1.4	1.4	1.3	1.4	1.6	1.5	1.5	1.7	1.4	1.4	1.4	1.4	1.1
Paper and allied products.....	4.2	3.7	4.1	4.2	4.3	4.3	4.5	4.6	5.1	4.9	4.7	4.6	4.6	4.6	3.9
Printing and publishing.....	3.0	2.6	3.0	2.8	2.9	3.6	3.1	3.2	3.6	3.2	2.9	2.8	2.7	3.0	2.5
Chemicals and allied products.....	2.6	2.9	2.3	2.4	2.3	2.4	2.4	2.5	3.1	2.5	2.4	2.4	2.6	2.5	2.0
Products of petroleum and coal.....	1.5	1.7	1.4	1.5	1.6	1.5	1.8	2.1	2.3	2.0	2.3	1.7	1.6	1.8	1.8
Rubber products.....	2.4	1.7	2.3	2.8	3.1	2.8	2.5	3.5	4.3	4.6	4.8	5.9	3.9	3.7	2.3
Leather and leather products.....	1.0	.8	1.4	1.4	1.4	1.4	1.4	1.2	1.2	1.3	1.3	1.3	1.2	1.4	1.1
Average hourly earnings excluding overtime <sup>4</sup>															
Manufacturing.....	\$2.22	\$2.22	\$2.22	\$2.21	\$2.21	\$2.20	\$2.16	\$2.14	\$2.12	\$2.16	\$2.16	\$2.16	\$2.15	\$2.08	
Durable goods.....	2.37	2.38	2.38	2.37	2.37	2.35	2.31	2.28	2.28	2.27	2.31	2.32	2.32	2.30	2.23
Ordnance and accessories.....	2.55	2.56	2.56	2.55	2.55	2.54	2.53	2.52	2.49	2.48	2.49	2.49	2.49	2.49	2.42
Lumber and wood products.....	1.95	1.94	1.93	1.91	1.89	1.92	1.94	1.94	1.94	1.91	1.89	1.90	1.88	1.89	1.82
Furniture and fixtures.....	1.80	1.80	1.81	1.79	1.79	1.78	1.76	1.76	1.76	1.77	1.78	1.76	1.76	1.76	1.73
Stone, clay, and glass products.....	2.19	2.19	2.20	2.18	2.18	2.17	2.16	2.14	2.14	2.12	2.13	2.12	2.12	2.13	2.04
Primary metal industries.....	2.77	2.78	2.77	2.77	2.78	2.77	2.70	2.67	2.66	2.55	2.73	2.74	2.74	2.70	2.61
Fabricated metal products.....	2.37	2.36	2.35	2.35	2.35	2.33	2.29	2.28	2.29	2.28	2.29	2.29	2.29	2.29	2.21
Machinery (except electrical).....	2.48	2.47	2.47	2.47	2.46	2.46	2.45	2.44	2.43	2.41	2.41	2.41	2.41	2.42	2.33
Electrical machinery.....	2.24	2.24	2.23	2.23	2.22	2.20	2.18	2.17	2.16	2.15	2.17	2.16	2.16	2.16	2.11
Transportation equipment.....	2.64	2.64	2.64	2.64	2.64	2.64	2.60	2.62	2.62	2.60	2.67	2.67	2.66	2.68	2.67
Instruments and related products.....	2.29	2.28	2.28	2.27	2.26	2.25	2.24	2.23	2.22	2.22	2.23	2.23	2.21	2.22	2.15
Miscellaneous manufacturing.....	1.89	1.89	1.88	1.89	1.89	1.88	1.84	1.83	1.83	1.84	1.84	1.84	1.84	1.84	1.80
Nondurable goods.....	2.01	2.01	2.00	1.99	1.98	1.97	1.96	1.95	1.95	1.93	1.95	1.94	1.94	1.94	1.89
Food and kindred products.....	2.11	2.12	2.11	2.10	2.10	2.08	2.05	2.02	1.99	1.97	2.00	2.01	2.02	2.02	1.94
Tobacco manufactures.....	1.78	1.78	1.71	1.69	1.69	1.68	1.67	1.66	1.62	1.59	1.72	1.70	1.72	1.64	1.87
Textile-mill products.....	1.58	1.56	1.56	1.54	1.54	1.53	1.53	1.53	1.53	1.52	1.52	1.52	1.52	1.52	1.47
Apparel and other finished textile products.....	1.51	1.50	1.53	1.52	1.51	1.50	1.50	1.49	1.50	1.48	1.48	1.48	1.49	1.49	1.49
Paper and allied products.....	2.15	2.14	2.14	2.14	2.14	2.12	2.12	2.12	2.12	2.10	2.10	2.06	2.07	2.09	2.02
Printing and publishing.....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Chemicals and allied products.....	2.42	2.40	2.40	2.40	2.39	2.39	2.37	2.36	2.39	2.36	2.37	2.35	2.32	2.34	2.26
Products of petroleum and coal.....	2.84	2.87	2.85	2.85	2.86	2.85	2.84	2.80	2.83	2.79	2.82	2.82	2.82	2.81	2.69
Rubber products.....	2.44	2.42	2.41	2.41	2.42	2.41	2.39	2.38	2.35	2.36	2.38	2.34	2.30	2.36	2.28
Leather and leather products.....	1.63	1.62	1.61	1.60	1.60	1.59	1.59	1.58	1.58	1.58	1.57	1.58	1.58	1.58	1.55

<sup>1</sup> For comparability of data with those published in issues prior to August 1968, see footnote 1, table A-2

<sup>2</sup> Preliminary.

<sup>3</sup> Covers premium overtime hours of production and related workers during the pay period ending nearest the 15th of the month. Overtime hours are those for which premiums were paid because the hours were in excess of the number of hours of either the straight-time workday or workweek. Weekend and holiday hours are included only if premium wage rates were paid. Hours

for which only shift differential, hazard, incentive, or other similar types of premiums were paid are excluded. These data are not available prior to 1956.

<sup>4</sup> Derived by assuming that overtime hours are paid at the rate of time and one-half.

<sup>5</sup> Not available as average overtime rates are significantly above time and one-half. Inclusion of data for the group in the nondurable-goods total has little effect.

TABLE C-3. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities<sup>1</sup>

(1947-49=100)

Activity	1960												1959						Annual average	
	Man-hours																			
	June <sup>1</sup>	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958					
Total.....	102.4	100.9	98.4	97.4	98.4	99.8	102.4	100.1	101.4	103.0	103.2	104.0	105.7	100.7	94.3					
Mining.....	60.2	66.6	66.5	64.9	63.8	64.0	67.3	64.1	60.0	59.2	61.7	66.9	71.4	65.4	67.9					
Contract construction.....	136.0	126.6	114.3	94.9	98.5	101.6	118.9	123.3	133.7	136.5	140.1	140.1	138.9	123.4	118.2					
Manufacturing.....	99.8	99.5	98.3	99.9	100.8	101.6	102.4	99.2	99.5	101.1	100.8	101.3	103.3	99.8	92.6					
Durable goods.....	106.0	106.6	105.8	108.1	109.3	110.3	109.8	103.4	103.3	103.9	101.6	108.0	111.7	105.6	93.9					
Ordnance and accessories.....	309.3	327.2	325.9	336.4	332.3	332.1	334.7	325.9	328.0	326.9	313.2	322.0	325.0	325.3	303.0					
Lumber and wood products.....	80.8	78.2	74.2	70.6	72.4	72.2	76.9	78.7	81.7	82.5	84.6	83.2	84.4	78.4	72.7					
Furniture and fixtures.....	108.7	107.7	108.0	105.7	109.2	109.3	113.5	111.4	113.8	112.4	111.7	108.0	108.2	108.7	97.2					
Stone, clay and glass products.....	105.8	104.7	102.4	100.1	101.3	101.2	105.0	105.4	106.9	108.9	110.3	108.9	110.0	104.6	94.7					
Primary metal industries.....	92.6	95.6	99.0	103.1	104.3	106.1	105.2	93.1	59.1	60.2	61.4	98.4	109.6	91.1	83.7					
Fabricated metal products.....	108.7	108.3	106.2	109.8	111.3	112.3	110.6	101.9	105.9	111.6	107.9	110.5	115.3	108.7	101.1					
Machinery (except electrical).....	102.7	103.6	103.5	105.4	105.3	105.1	104.8	100.0	102.0	103.5	100.9	102.5	105.6	101.0	88.9					
Electrical machinery.....	133.3	133.0	131.7	137.3	138.4	141.5	142.7	139.3	142.0	141.0	134.2	130.7	132.4	132.6	115.9					
Transportation equipment.....	116.0	119.4	117.7	123.8	127.0	130.1	119.2	100.5	122.4	119.9	113.6	123.1	125.4	120.4	111.6					
Instruments and related products.....	117.9	118.6	118.7	121.0	119.8	120.6	123.5	122.4	122.8	121.7	118.5	116.9	118.7	117.1	105.4					
Miscellaneous manufacturing.....	103.8	102.8	100.5	102.4	100.3	98.5	103.5	108.7	111.0	109.4	105.1	98.6	101.2	101.1	92.7					
Nondurable goods.....	92.4	91.0	89.4	90.1	90.5	91.2	93.6	94.2	95.0	97.7	97.7	93.2	93.2	93.0	88.7					
Food and kindred products.....	83.1	78.6	76.4	74.1	74.4	77.5	81.4	84.7	88.1	90.2	97.3	89.9	84.4	83.7	84.3					
Tobacco manufactures.....	66.4	64.8	61.8	61.6	68.4	74.6	79.6	77.9	92.6	100.0	90.6	67.0	68.2	77.1	77.7					
Textile-mill products.....	73.3	73.0	71.8	71.7	72.5	72.9	74.6	74.8	75.6	74.5	76.1	74.2	75.9	74.4	69.2					
Apparel and other finished textile products.....	103.7	104.4	100.9	106.4	107.1	104.6	107.0	108.0	105.9	107.0	109.7	102.6	104.2	105.1	96.8					
Paper and allied products.....	113.0	111.5	110.2	110.3	110.2	111.6	112.9	113.6	114.2	116.6	115.0	113.5	114.4	112.7	108.0					
Printing and publishing.....	115.3	115.0	113.4	114.7	113.4	113.7	117.5	115.3	115.7	116.8	112.9	111.4	111.7	112.8	109.0					
Chemicals and allied products.....	105.8	107.9	109.8	105.7	105.2	104.9	108.5	106.6	106.3	108.9	103.7	102.5	103.6	104.3	99.2					
Products of petroleum and coal.....	84.4	83.6	83.6	82.4	82.7	82.1	83.1	83.4	81.3	84.0	81.0	86.1	86.8	84.1	84.2					
Rubber products.....	103.9	99.7	96.6	102.9	104.9	106.3	106.5	104.2	108.9	110.2	108.3	108.6	99.2	103.5	92.0					
Leather and leather products.....	89.0	84.5	82.6	89.7	90.2	91.9	92.1	91.0	88.4	90.8	94.6	94.5	94.0	92.2	86.0					
Payrolls																				
Mining.....	108.2	108.7	108.7	106.5	104.4	105.4	110.5	104.4	95.9	94.3	98.4	106.5	115.4	105.0	104.9					
Contract construction.....	231.2	207.9	176.1	180.2	185.4	214.8	221.8	230.1	242.9	257.7	244.4	240.0	216.9	200.5	200.5					
Manufacturing.....	172.3	171.7	168.8	172.6	173.9	175.5	175.4	166.8	165.9	160.1	164.9	170.2	174.4	167.2	148.7					

<sup>1</sup> For comparability of data with those published in issues prior to August 1958, see footnote 1, table A-2.

For mining and manufacturing, data refer to production and related workers; for contract construction, to construction workers.

<sup>2</sup> Preliminary.

TABLE C-4. Gross and spendable average weekly earnings of production workers in manufacturing, in current and 1947-49 dollars<sup>1</sup>

Item	1960					1959									Annual average	
	May <sup>1</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	1959	1958	
<i>Manufacturing</i>																
Gross average weekly earnings:																
Current dollars.....	\$91.37	\$89.60	\$90.91	\$91.14	\$92.29	\$92.16	\$88.98	\$89.06	\$90.47	\$88.70	\$89.65	\$91.17	\$90.32	\$89.47	\$83.50	
1947-49 dollars.....	72.34	71.00	72.32	72.56	73.60	73.43	70.84	70.96	71.46	71.07	71.78	73.23	72.84	71.81	67.61	
Spendable average weekly earnings:																
Worker with no dependents:																
Current dollars.....	73.85	72.48	73.49	73.67	74.56	74.92	72.45	72.51	72.83	72.23	72.97	74.15	73.49	72.83	68.46	
1947-49 dollars.....	58.47	57.43	58.46	58.65	59.46	59.70	57.68	57.78	58.17	57.88	58.42	59.56	59.27	58.45	55.43	
Worker with 3 dependents:																
Current dollars.....	81.41	80.01	81.05	81.23	82.14	82.50	79.97	80.03	80.36	79.75	80.50	81.71	81.03	80.36	75.77	
1947-49 dollars.....	64.46	63.40	64.48	64.67	65.50	65.74	63.67	63.77	64.19	63.90	64.45	65.63	65.33	64.49	61.44	

<sup>1</sup> See footnote 1, table C-3.

Spendable average weekly earnings are obtained by deducting from gross average weekly earnings, Federal social security and income taxes for which the worker is liable. The amount of tax liability depends, of course, on the number of dependents supported by the worker as well as on the level of his gross income. Spendable earnings have been computed for 2 types of income receivers: (1) a worker with no dependents; (2) a worker with 3 dependents. The primary value of the spendable series is that of measuring relative changes in disposable earnings for 2 types of income receivers.

The computations of spendable earnings for both the worker with no dependents and the worker with 3 dependents are based upon the gross average

weekly earnings for all production workers in manufacturing without direct regard to marital status, family composition, or other sources of income.

Gross and spendable average weekly earnings expressed in 1947-49 dollars indicate changes in the level of average weekly earnings after adjustment for changes in purchasing power as measured by the Bureau's Consumer Price Index.

<sup>2</sup> Preliminary.

NOTE: For a description of these series, see The Calculation and Uses of the Spendable Earnings Series (in Monthly Labor Review, January 1959, pp. 50-54).

## D.—Consumer and Wholesale Prices

TABLE D-1. Consumer Price Index<sup>1</sup>—All-city average: All items, groups, subgroups, and special groups of items

[1947-49=100]

Group	1960						1959						Annual average		
	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
All items	126.5	126.3	126.2	125.7	125.6	125.4	125.5	125.6	125.5	125.2	124.8	124.9	124.5	124.6	123.5
Food <sup>1</sup>	120.3	119.7	119.5	117.7	117.4	117.6	117.8	117.9	118.4	118.7	118.3	119.4	118.9	118.3	120.3
Food at home	117.7	117.0	116.7	114.7	114.4	114.7	115.0	115.1	115.8	116.2	115.7	117.1	116.6	115.9	118.5
Cereals and bakery products	136.1	135.6	135.8	135.5	135.2	134.8	134.5	134.2	134.1	134.1	134.0	134.4	134.2	134.2	133.1
Meats, poultry, and fish	110.3	109.7	109.3	107.2	106.2	106.4	106.6	107.9	109.0	110.4	109.9	112.0	111.6	110.7	115.1
Dairy products	115.0	115.0	115.3	116.4	116.5	116.5	116.7	116.0	116.1	115.5	114.1	113.3	112.3	114.3	118.4
Fruits and vegetables	138.1	132.9	129.9	125.0	125.9	125.7	125.5	125.4	124.5	124.1	123.6	130.8	134.5	125.1	127.1
Other foods at home <sup>2</sup>	104.5	104.9	106.1	103.4	102.9	104.5	105.4	106.4	107.0	107.6	106.2	105.7	102.8	106.1	112.4
Housing <sup>3</sup>	131.3	131.2	131.4	131.3	131.2	130.7	130.4	130.4	130.1	129.7	129.3	129.0	128.9	129.2	127.7
Rent	141.6	141.4	141.4	141.2	141.0	140.9	140.5	140.5	140.4	140.0	139.5	139.6	139.5	139.7	137.7
Gas and electricity	124.7	124.7	124.4	124.1	124.0	123.2	122.7	121.7	121.7	121.6	120.1	119.5	119.3	119.9	117.0
Solid fuels and fuel oil	132.3	132.9	130.3	137.2	139.0	139.0	137.3	135.9	135.5	135.0	133.9	134.0	133.9	136.6	134.0
Housefurnishings	104.3	104.3	104.7	104.7	104.3	104.0	104.2	104.4	104.1	104.0	103.6	104.0	103.9	103.9	103.9
Household operation	137.3	137.2	137.0	136.9	136.3	135.9	135.5	135.4	135.3	135.2	134.6	134.3	133.9	134.3	131.4
Apparel <sup>4</sup>	108.9	108.9	108.9	108.8	108.4	107.9	109.2	109.4	109.4	109.0	108.0	107.5	107.3	107.9	107.6
Men's and boys'	109.5	109.7	109.5	108.9	108.7	108.8	109.1	109.1	108.9	108.2	108.5	108.3	108.1	108.4	108.5
Women's and girls'	99.1	99.4	99.6	99.6	99.3	99.0	100.3	100.9	101.3	100.5	98.8	98.8	98.8	99.5	99.1
Footwear	140.1	139.8	139.8	139.7	138.7	139.4	139.7	139.2	138.5	137.9	137.3	135.3	134.5	135.2	129.8
Other apparel <sup>5</sup>	93.1	93.2	92.9	93.0	92.8	92.2	93.1	93.3	92.9	92.9	92.5	92.3	91.8	92.3	92.0
Transportation	145.8	145.6	146.1	146.5	147.5	147.6	148.7	149.0	148.5	148.4	146.7	146.3	145.9	146.3	140.5
Private	134.1	133.9	134.4	134.9	136.0	136.3	137.5	137.9	137.4	135.3	133.5	135.2	134.0	135.2	129.7
Public	199.7	199.4	199.4	199.4	198.3	197.2	197.2	196.0	195.9	194.9	194.9	192.7	193.0	193.0	188.0
Medical care	156.1	155.9	155.5	155.0	154.7	153.5	153.2	153.0	152.5	152.2	151.4	151.0	150.6	150.5	144.8
Personal care	133.2	133.2	132.9	132.7	132.6	132.7	132.9	132.7	132.5	132.1	131.7	131.3	131.1	131.2	128.6
Reading and recreation	121.1	121.4	121.1	120.9	120.6	120.3	120.4	120.0	119.7	119.6	119.1	119.1	118.1	118.6	116.7
Other goods and services	132.0	131.9	131.9	131.7	131.5	131.8	131.7	131.5	131.5	131.5	131.1	130.8	129.2	129.7	127.2
Special groups:															
All items less food	129.7	129.7	129.8	129.7	129.7	129.4	129.5	129.5	129.2	128.7	128.2	127.9	127.5	127.9	125.5
All items less shelter	124.0	123.8	123.7	123.1	123.0	122.9	123.1	123.1	123.2	122.9	122.4	122.7	122.2	122.2	121.2
All commodities less food	115.3	115.3	115.6	115.7	116.0	115.9	116.4	116.5	116.3	115.7	115.3	115.1	114.7	115.1	113.4
All commodities	117.6	117.3	117.4	116.7	116.7	116.7	117.1	117.2	117.3	117.0	116.6	117.0	116.6	116.6	115.3
Nondurables <sup>6</sup>	119.8	119.4	119.4	118.3	118.0	118.1	118.5	118.5	118.8	118.3	118.7	118.2	118.1	118.6	116.6
Nondurables less food	119.6	119.4	119.7	119.6	119.4	119.2	119.9	119.8	119.8	119.3	118.1	117.8	117.9	118.1	116.9
Nondurables less food and apparel	128.7	128.4	129.0	128.9	128.8	128.8	129.1	128.9	128.8	128.2	127.8	127.3	126.8	127.3	125.6
Durables <sup>7</sup>	111.5	111.9	112.1	112.5	113.3	113.3	113.8	114.1	113.6	112.8	112.8	113.1	112.8	113.0	110.5
Durables less cars	103.2	103.5	103.6	103.6	103.4	103.4	103.3	103.4	103.3	103.1	103.0	103.5	103.3	103.3	103.4
All services <sup>8</sup>	149.7	149.6	149.4	149.2	148.9	148.2	147.8	147.6	147.3	146.9	146.3	145.8	145.4	145.8	142.4
All services less rent	151.8	151.7	151.5	151.3	150.9	150.1	149.7	149.5	149.1	148.7	148.1	147.5	147.1	147.5	143.8
Household operation services, gas, and electricity	138.9	138.8	138.5	138.3	137.5	137.2	136.7	136.3	136.3	135.2	135.1	134.6	134.3	134.8	131.4
Transportation services	184.5	184.3	184.2	183.9	183.6	182.7	182.7	182.2	182.1	181.7	181.3	180.9	179.3	180.3	174.1
Medical care services	162.5	162.4	161.9	161.3	160.8	159.5	159.2	158.8	158.4	157.9	157.0	156.5	156.1	156.3	149.2
Other services	135.1	135.2	135.0	134.9	134.7	134.1	133.6	133.7	133.1	132.6	132.2	131.6	131.4	131.7	129.6

<sup>1</sup> The Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families. Data for 48 large, medium-size, and small cities are combined for the all-city average.

<sup>2</sup> In addition to subgroups shown here, total food includes restaurant meals and other food bought and eaten away from home.

<sup>3</sup> Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic), and other miscellaneous foods.

<sup>4</sup> In addition to subgroups shown here, total housing includes the purchase price of homes and other homeowner costs.

<sup>5</sup> Includes yard goods, diapers, and miscellaneous items.

<sup>6</sup> Revised.

<sup>7</sup> Includes food, house paint, solid fuels, fuel oil, textile housefurnishings, household paper, electric light bulbs, laundry soap and detergents, apparel

(except shoe repairs), gasoline, motor oil, prescriptions and drugs, toilet goods, nondurable toys, newspapers, cigarettes, cigars, beer, and whiskey.

<sup>8</sup> Includes water heaters, central heating furnaces, kitchen sinks, sink faucets, porch flooring, household appliances, furniture and bedding, floor coverings, dinnerware, automobiles, tires, radio and television sets, durable toys, and sporting goods.

<sup>9</sup> Includes rent, home purchase, real estate taxes, mortgage interest, property insurance, repainting garage, repainting rooms, reshelving roof, refinishing floors, gas, electricity, dry cleaning, laundry service, domestic service, telephone, water, postage, shoe repairs, auto repairs, auto insurance, auto registration, transit fares, railroad fares, professional medical services, hospital services, hospitalization and surgical insurance, barber and beauty shop services, television repairs, and motion picture admissions.

TABLE D-2. Consumer Price Index<sup>1</sup>—All items and food indexes, by city

[1947-49=100]

City	1960						1959						Annual average		
	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
	All items														
All-city average <sup>1</sup> .....	126.5	126.3	126.2	125.7	125.6	125.4	125.5	125.6	125.5	125.2	124.8	124.9	124.5	124.6	123.5
Atlanta, Ga.....	127.1	(9)	(9)	126.7	(9)	(9)	126.4	(9)	(9)	126.0	(9)	(9)	125.5	125.4	124.5
Baltimore, Md.....	128.3	(9)	(9)	127.7	(9)	(9)	127.2	(9)	(9)	127.5	(9)	(9)	126.6	126.8	124.5
Boston, Mass.....	(9)	(9)	128.3	(9)	(9)	126.4	(9)	(9)	126.7	(9)	(9)	125.6	(9)	125.8	124.8
Chicago, Ill.....	130.1	129.6	129.5	129.2	129.1	128.9	129.0	129.1	129.3	129.2	128.3	128.3	127.7	128.1	127.0
Cincinnati, Ohio.....	124.6	(9)	(9)	123.6	(9)	(9)	123.8	(9)	(9)	123.6	(9)	(9)	123.1	123.1	122.3
Cleveland, Ohio.....	(9)	127.1	(9)	(9)	126.1	(9)	(9)	126.4	(9)	(9)	125.8	(9)	(9)	125.6	124.8
Detroit, Mich.....	125.1	124.3	124.2	123.9	123.9	123.4	124.0	124.1	124.9	124.8	123.7	124.4	123.4	123.8	123.9
Houston, Tex.....	(9)	125.1	(9)	(9)	125.6	(9)	(9)	125.4	(9)	125.4	(9)	124.8	(9)	124.6	123.6
Kansas City, Mo.....	(9)	(9)	126.6	(9)	(9)	127.0	(9)	126.9	(9)	126.9	(9)	126.0	(9)	125.9	124.1
Los Angeles, Calif.....	129.7	129.8	130.1	129.3	*128.8	*129.1	128.9	128.8	128.5	127.8	127.5	127.6	127.0	127.4	125.4
Minneapolis, Minn.....	(9)	(9)	127.1	(9)	(9)	126.2	(9)	(9)	126.5	(9)	(9)	125.4	(9)	125.6	124.3
New York, N.Y.....	124.9	124.9	124.7	124.5	124.4	124.1	124.2	124.1	123.7	123.5	123.0	123.5	122.5	122.8	121.1
Philadelphia, Pa.....	126.4	126.4	125.4	126.0	125.5	125.5	126.5	126.2	126.0	125.8	124.4	124.2	124.0	124.5	123.1
Pittsburgh, Pa.....	(9)	(9)	127.9	(9)	(9)	126.6	(9)	(9)	126.8	(9)	(9)	125.7	(9)	125.5	124.6
Portland, Ore.....	(9)	(9)	127.5	(9)	(9)	*127.2	(9)	(9)	126.3	(9)	(9)	126.1	(9)	125.7	124.4
St. Louis, Mo.....	127.2	(9)	(9)	126.3	(9)	(9)	126.6	(9)	(9)	126.4	(9)	(9)	126.3	126.3	124.7
San Francisco, Calif.....	132.4	(9)	(9)	131.6	(9)	(9)	131.8	(9)	(9)	130.8	(9)	(9)	129.4	130.0	127.5
Seranton, Pa.....	(9)	122.1	(9)	(9)	121.4	(9)	121.5	(9)	121.5	(9)	121.2	(9)	(9)	120.8	120.2
Seattle, Wash.....	(9)	129.7	(9)	(9)	*129.0	(9)	(9)	129.2	(9)	(9)	128.9	(9)	(9)	128.2	125.8
Washington, D.C.....	(9)	123.1	(9)	(9)	121.9	(9)	(9)	121.7	(9)	(9)	122.0	(9)	(9)	121.7	121.1
Food															
All-city average <sup>2</sup> .....	120.3	119.7	119.5	117.7	117.4	117.6	117.8	117.9	118.4	118.7	118.3	119.4	118.9	118.3	120.3
Atlanta, Ga.....	117.6	116.8	116.8	115.0	114.1	114.5	114.2	114.3	115.3	116.5	116.4	117.0	117.1	115.7	118.0
Baltimore, Md.....	121.2	120.5	119.7	118.2	116.7	116.2	117.4	117.8	118.1	118.8	118.3	119.4	118.6	118.0	120.9
Boston, Mass.....	119.0	118.6	119.2	118.3	117.7	117.4	118.3	119.4	119.6	119.8	119.0	118.9	118.4	118.7	119.7
Chicago, Ill.....	118.8	117.2	116.7	115.1	114.4	115.2	114.6	115.3	116.2	116.8	116.1	117.1	116.4	115.8	117.3
Cincinnati, Ohio.....	121.5	120.4	120.4	117.8	117.8	117.7	118.2	118.4	119.0	119.2	118.2	119.9	119.3	118.8	122.1
Cleveland, Ohio.....	117.1	116.4	115.8	113.4	112.9	113.1	113.4	113.1	113.5	114.2	113.8	114.6	114.6	114.1	117.2
Detroit, Mich.....	120.0	119.0	119.1	116.5	115.7	115.8	116.3	116.9	118.1	118.1	116.8	118.0	118.7	117.5	121.1
Houston, Tex.....	114.8	114.4	114.8	113.0	113.3	113.6	113.5	113.9	114.1	114.1	114.4	114.9	114.4	114.7	117.0
Kansas City, Mo.....	114.0	112.7	112.4	110.7	110.4	111.3	111.4	111.3	111.9	112.6	112.4	112.9	113.1	112.2	114.4
Los Angeles, Calif.....	126.4	126.1	126.8	124.4	123.7	125.2	123.6	123.6	124.0	123.7	122.7	123.3	123.6	123.5	123.3
Minneapolis, Minn.....	119.3	118.1	118.6	116.6	116.5	117.0	117.3	117.9	117.8	118.0	117.5	119.2	118.8	118.0	118.6
New York, N.Y.....	121.8	121.8	121.4	120.7	120.8	120.5	120.8	120.7	120.4	120.9	120.0	121.4	120.0	120.3	120.9
Philadelphia, Pa.....	122.6	121.7	121.2	120.0	119.1	119.5	120.1	120.6	121.4	122.0	120.9	121.9	121.3	120.9	123.1
Pittsburgh, Pa.....	122.1	122.2	121.0	118.4	118.6	118.7	119.1	119.6	120.1	120.7	119.5	120.5	120.8	119.8	121.8
Portland, Ore.....	121.3	120.4	121.2	120.0	120.2	121.2	121.0	120.7	121.1	121.2	121.2	121.6	121.8	120.7	120.7
St. Louis, Mo.....	119.6	118.5	118.0	116.7	117.5	116.2	117.6	117.7	118.3	118.7	117.8	119.1	119.7	118.7	121.2
San Francisco, Calif.....	124.2	124.3	124.6	122.7	122.2	123.6	123.1	123.3	122.9	122.8	122.6	122.2	123.0	122.6	123.1
Seranton, Pa.....	116.5	115.8	115.5	113.9	113.0	113.5	113.9	114.3	115.3	116.4	115.1	117.3	116.6	115.4	118.4
Seattle, Wash.....	122.6	122.6	122.8	120.9	121.0	121.4	121.1	120.8	121.1	120.8	120.8	121.4	121.6	120.8	121.3
Washington, D.C.....	120.9	120.4	119.5	117.9	117.2	117.3	118.1	118.0	118.5	119.5	118.9	120.5	119.5	119.0	121.6

<sup>1</sup> See footnote 1, table D-1. Indexes measure time-to-time changes in prices of goods and services purchased by urban wage-earner and clerical-worker families. They do not indicate whether it costs more to live in one city than in another.

<sup>2</sup> Average of 46 cities.

<sup>3</sup> All items indexes are computed monthly for 5 cities and once every 3 months on a rotating cycle for 15 other cities.

<sup>4</sup> Revised.



TABLE D-3. Indexes of wholesale prices,<sup>1</sup> by group and subgroup of commodities

[1947-49=100, unless otherwise specified]

Commodity group	1960						1969						Annual average		
	June <sup>2</sup>	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
All commodities.....	119.5	119.7	120.0	120.0	119.3	119.3	118.9	118.9	119.1	119.7	119.1	119.5	119.7	119.5	119.2
Farm products and processed foods.....	98.6	99.1	99.2	99.1	96.6	96.3	95.5	95.4	96.7	96.6	96.7	96.2	96.2	98.2	103.1
Farm products.....	89.0	90.4	91.1	90.4	87.0	86.5	85.9	85.4	86.5	86.9	87.1	86.4	86.8	89.1	94.9
Fresh and dried fruits and vegetables.....	109.7	116.9	111.5	104.4	100.5	104.9	107.9	103.2	102.2	103.1	92.8	98.5	100.9	102.7	112.0
Grains.....	77.5	77.8	79.4	78.2	76.7	77.2	76.1	76.5	75.7	76.2	77.7	78.2	78.2	77.3	79.5
Livestock and live poultry.....	85.1	85.8	85.7	86.2	80.8	78.5	76.0	75.3	75.5	82.1	83.1	84.8	80.5	85.1	92.9
Plant and animal fibers.....	96.7	96.6	96.3	96.0	96.1	95.9	95.7	94.7	94.7	95.6	96.7	100.0	101.6	98.2	101.5
Fluid milk.....	93.2	92.7	95.5	97.9	99.0	93.9	98.3	98.2	97.3	98.0	94.4	92.2	90.0	94.4	94.6
Eggs.....	64.2	69.6	80.2	75.8	58.4	56.9	62.8	63.4	60.0	85.4	66.8	65.4	65.5	65.6	81.7
Hay, hayseeds, and oilseeds.....	74.4	76.5	76.3	76.7	77.1	77.5	76.3	76.3	78.4	73.0	73.1	74.9	75.0	76.6	76.9
Other farm products.....	128.0	128.3	128.6	127.9	128.9	127.4	127.5	131.7	131.5	133.4	132.1	132.2	132.3	132.6	140.4
Processed foods.....	107.6	107.3	106.8	107.3	105.7	105.7	105.6	104.7	104.9	106.4	107.8	105.8	107.5	106.1	107.0
Cereal and bakery products.....	121.2	121.2	120.9	120.8	120.6	120.7	120.4	120.4	120.4	120.4	119.5	119.5	119.5	119.2	119.3
Meats, poultry, and fish.....	98.0	98.5	96.7	97.8	96.1	92.4	90.5	90.8	95.1	96.7	94.8	96.3	101.9	98.2	106.7
Dairy products and ice cream.....	116.0	114.9	115.6	117.7	118.4	118.8	118.1	117.7	116.7	116.2	114.7	113.9	111.9	114.3	112.7
Canned and frozen fruits and vegetables.....	106.9	106.3	105.8	105.8	104.5	104.5	104.6	104.4	107.4	106.9	107.9	110.6	111.1	109.0	109.7
Sugar and confectionery.....	114.0	114.0	114.1	113.7	113.9	113.3	115.6	116.7	117.4	116.4	115.5	115.2	115.6	115.1	115.6
Packaged beverage materials.....	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	146.5	165.7
Animal fats and oils.....	56.8	56.0	57.6	53.1	49.4	48.7	50.1	54.2	53.2	53.5	50.9	52.7	54.4	54.6	72.0
Crude vegetable oils.....	50.3	45.7	47.5	45.2	45.3	45.0	45.6	45.8	45.7	52.0	55.6	57.7	58.9	58.1	60.1
Refined vegetable oils.....	56.3	57.0	56.7	55.6	54.5	54.8	52.5	52.6	54.0	55.5	57.9	61.9	61.9	58.9	67.9
Vegetable oil and products.....	72.7	71.5	71.5	71.5	71.2	71.2	71.1	71.9	73.6	74.2	74.1	74.9	74.6	74.0	82.8
Other processed foods.....	103.9	102.2	102.8	101.7	101.6	103.9	100.9	98.3	96.8	96.9	96.6	96.1	95.4	94.7	96.6
All commodities except farm products.....	124.6	124.5	124.9	124.9	124.7	124.8	124.4	124.4	124.5	124.8	124.5	124.7	124.6	124.5	123.3
All commodities except farm and foods.....	128.2	128.2	128.7	128.6	128.7	128.8	128.6	128.5	128.4	128.4	128.4	128.4	128.2	128.2	126.0
Textile products and apparel.....	96.3	96.3	96.3	96.3	96.5	96.6	96.7	96.3	96.9	95.9	95.7	95.3	94.9	95.0	93.5
Cotton products.....	94.8	94.8	95.0	95.6	95.5	95.9	95.0	94.0	93.0	92.6	92.1	91.9	91.6	91.7	88.4
Wool products.....	102.1	102.4	102.7	102.8	103.2	104.0	104.2	103.7	104.1	104.7	104.3	103.3	102.2	101.6	100.8
Manmade fiber textile products.....	79.6	79.7	79.4	79.4	79.8	79.4	81.3	81.4	81.0	82.1	82.3	82.2	81.8	81.1	80.2
Silk products.....	121.6	118.7	118.0	116.6	119.5	122.0	121.7	117.4	114.2	113.2	113.7	113.4	114.2	113.5	113.5
Apparel.....	109.8	100.6	100.7	100.7	100.6	100.8	100.9	100.9	100.6	100.6	100.4	99.9	99.6	100.0	99.3
Other textile products.....	85.1	86.8	82.5	80.5	79.8	79.3	79.4	78.4	78.5	77.3	75.2	75.5	75.6	76.8	75.2
Hides, skins, leather, and leather products.....	110.3	111.2	112.1	111.8	112.0	112.7	112.3	111.7	116.2	119.1	119.7	119.3	118.9	114.3	100.6
Hides and skins.....	67.1	72.9	73.5	72.0	69.8	73.7	73.8	67.2	87.5	102.4	106.9	107.7	106.7	90.7	57.5
Leather.....	103.0	103.5	104.7	102.8	104.8	105.5	103.5	103.8	112.2	117.1	117.3	118.7	120.1	111.8	92.3
Footwear.....	132.5	132.5	133.5	134.2	134.2	134.2	134.1	133.8	133.5	132.3	132.3	130.6	130.2	129.5	122.1
Other leather products.....	106.3	106.7	107.3	107.3	107.2	108.0	107.8	109.3	111.3	113.9	114.0	113.9	112.0	109.0	97.5
Fuel, power, and lighting materials.....	112.3	110.8	112.2	112.3	112.0	111.9	111.7	111.2	111.4	111.9	112.2	111.1	111.2	112.7	112.7
Coal.....	119.2	118.7	119.0	124.0	124.1	124.1	124.1	124.0	123.6	123.0	122.0	121.1	119.8	122.6	122.9
Coke.....	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	168.8	161.9
Gas fuels.....	112.4	111.6	115.6	115.6	114.5	116.6	115.5	115.5	111.1	112.8	109.8	106.8	106.8	110.9	101.7
Electric power.....	101.8	101.7	101.8	101.8	101.8	101.3	101.2	100.7	100.7	100.8	100.6	100.8	100.8	100.8	100.4
Petroleum and products.....	116.0	113.6	115.4	115.0	114.6	114.4	114.3	113.9	114.8	115.1	116.2	114.8	115.0	116.6	117.7
Chemicals and allied products.....	110.2	110.2	110.2	110.1	110.0	109.9	110.0	110.0	110.0	109.9	109.7	109.9	110.0	109.9	110.4
Industrial chemicals.....	124.4	124.4	124.4	124.2	124.2	124.1	124.0	123.9	123.9	123.8	123.7	123.9	123.8	123.8	123.5
Prepared paint.....	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3
Paint materials.....	103.2	103.0	102.9	102.8	103.0	103.0	102.9	102.8	102.8	102.1	101.5	101.3	101.4	101.9	103.6
Drugs and pharmaceuticals.....	95.1	94.8	94.5	94.2	94.0	93.8	93.7	93.8	93.8	93.8	93.7	93.6	93.7	93.4	94.0
Fats and oils, inedible.....	47.8	50.2	51.7	50.6	49.4	49.2	50.8	52.2	54.5	55.0	53.8	55.3	58.4	55.7	62.6
Mixed fertilizer.....	110.2	110.2	110.2	110.1	110.1	109.6	109.5	109.4	109.4	109.4	109.2	108.8	108.9	109.5	110.7
Fertilizer materials.....	108.8	108.8	108.8	108.8	108.8	108.8	107.0	106.6	106.3	105.2	104.8	107.4	107.6	106.9	108.0
Other chemicals and allied products.....	106.4	106.4	106.4	106.5	106.5	106.5	106.6	106.8	106.8	106.8	106.7	106.6	106.6	106.6	106.8
Rubber and rubber products.....	146.9	146.7	145.1	145.2	145.1	143.5	142.5	144.9	142.3	142.0	141.0	146.4	146.5	144.7	145.0
Crude rubber.....	169.6	169.6	169.9	161.1	160.7	162.8	160.5	173.6	159.6	157.9	153.8	149.3	148.7	142.2	134.0
Tires and tubes.....	138.1	138.1	138.1	138.1	138.1	133.3	133.3	133.3	133.3	134.3	134.3	150.0	150.0	144.0	152.4
Other rubber products.....	145.1	144.5	144.5	144.6	144.6	144.6	143.0	143.0	143.0	142.2	141.4	141.6	142.4	142.2	142.7
Lumber and wood products.....	122.6	123.7	124.3	124.5	124.9	125.1	124.8	124.3	126.2	127.2	128.5	128.3	128.9	125.8	117.7
Lumber.....	123.4	124.9	125.7	125.9	126.1	126.1	125.9	125.8	127.9	129.3	130.3	129.9	130.4	127.1	118.0
Millwork.....	136.9	136.9	136.8	137.7	137.7	137.8	137.9	138.1	138.7	138.7	138.6	137.7	137.3	135.9	128.2
Plywood.....	95.5	95.7	96.1	95.9	97.0	98.2	97.2	94.5	98.5	96.6	100.9	102.4	105.2	101.2	97.1
Pulp, paper, and allied products.....	133.6	133.4	133.1	133.1	133.2	133.7	132.4	132.3	132.5	132.4	132.3	132.4	132.3	132.2	131.0
Woodpulp.....	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2
Wastepaper.....	82.3	83.2	88.4	89.3	93.6	108.0	109.8	109.8	118.0	118.0	115.9	115.9	115.9	112.5	88.3
Paper.....	145.9	145.9	145.1	144.8	144.5	144.5	144.3	144.3	144.3	143.8	143.7	143.8	143.3	143.4	142.3
Paperboard.....	135.9	135.9	135.9	135.9	135.9	135.9	135.9	135.9	135.9	135.9	135.9	135.9	135.9	136.2	136.2
Converted paper and paperboard.....	131.1	130.6	130.0	130.0	130.0	130.0	127.5	127.4	127.4	127.3	127.4	127.6	127.6	127.6	127.6
Building paper and board.....	145.1	145.1	145.1	146.5	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	146.4	143.2
Metals and metal products.....	153.9	154.2	154.5	154.5	155.5	155.5	155.2	155.8	154.5						

TABLE D-3. Indexes of wholesale prices,<sup>1</sup> by group and subgroup of commodities—Continued

[1947-49=100, unless otherwise specified]

Commodity group	1960						1959						Annual average		
	June <sup>1</sup>	May <sup>2</sup>	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1959	1958
Machinery and motive products.....	153.4	<sup>3</sup> 153.5	154.0	153.9	153.9	153.8	153.7	153.6	153.7	153.9	153.8	153.6	153.0	153.0	146.8
Agricultural machinery and equipment.....	145.8	145.7	145.6	145.3	145.3	144.3	144.0	143.9	143.4	143.5	143.4	143.4	143.5	143.4	139.1
Construction machinery and equipment.....	175.3	<sup>3</sup> 175.3	174.7	174.3	173.9	173.6	172.9	172.9	172.5	172.4	172.9	171.8	171.7	171.9	166.1
Metalworking machinery and equipment.....	179.8	179.0	178.3	178.3	177.6	177.7	177.6	177.5	177.4	176.6	176.0	174.0	173.7	174.5	170.1
General purpose machinery and equipment.....	166.7	167.8	167.9	167.7	168.2	167.8	167.9	167.5	167.0	166.8	166.5	165.9	165.8	165.3	160.0
Miscellaneous machinery.....	150.0	<sup>3</sup> 150.0	150.1	149.9	149.6	149.7	149.8	149.7	149.7	149.5	149.6	149.5	149.3	149.4	148.1
Electrical machinery and equipment.....	154.1	<sup>3</sup> 153.9	<sup>3</sup> 155.6	<sup>3</sup> 155.6	<sup>3</sup> 155.7	<sup>3</sup> 155.8	<sup>3</sup> 155.4	<sup>3</sup> 155.9	<sup>3</sup> 155.9	<sup>3</sup> 155.8	<sup>3</sup> 155.5	<sup>3</sup> 155.8	<sup>3</sup> 154.0 <sup>4</sup>	<sup>3</sup> 154.4	152.2
Motor vehicles.....	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	141.6	143.2	143.2	143.2	143.2	142.8	139.7
Furniture and other household durables.....	123.1	123.2	123.5	123.7	123.5	123.4	123.2	123.3	123.3	123.4	123.5	123.8	123.6	123.4	123.2
Household furniture.....	125.0	125.0	124.9	124.9	124.9	124.7	124.2	124.3	124.4	124.1	124.2	124.2	124.0	124.1	123.0
Commercial furniture.....	156.7	156.7	156.7	156.6	155.8	155.8	155.5	155.5	155.5	155.5	155.3	155.3	155.1	155.2	154.6
Floor coverings.....	130.6	130.8	130.8	130.6	129.6	129.6	129.0	129.3	129.3	128.9	128.6	128.6	128.1	128.1	127.8
Household appliances.....	101.8	<sup>3</sup> 102.1	103.1	103.2	103.3	103.3	103.7	104.1	103.9	104.3	104.4	104.4	105.1	104.7	104.7
Television, radio receivers, and phonographs.....	91.7	91.7	91.7	91.8	91.8	91.7	91.9	91.8	92.1	92.7	93.3	94.3	92.9	92.8	94.4
Other household durable goods.....	157.5	157.4	157.3	158.3	158.1	157.8	156.6	156.6	156.6	156.6	156.4	156.8	156.7	156.4	155.1
Nonmetallic minerals—structural.....	138.0	<sup>3</sup> 138.1	138.3	138.2	138.2	138.4	137.8	137.7	137.5	137.5	137.4	137.5	137.4	137.7	136.0
Flat glass.....	132.4	<sup>3</sup> 132.4	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.3	135.4
Concrete ingredients.....	142.1	142.1	142.1	142.1	142.0	142.0	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.3	139.0
Concrete products.....	131.5	131.5	131.3	131.0	131.1	130.8	130.4	130.3	130.3	130.2	129.7	129.9	129.7	129.7	128.1
Structural clay products.....	161.7	161.7	161.5	161.5	161.5	161.3	160.7	160.6	160.4	160.5	160.5	160.6	160.4	160.2	156.5
Gypsum products.....	153.2	153.2	153.2	153.2	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1	152.1
Prepared asphalt roofing.....	106.6	106.6	106.6	107.6	107.6	113.6	113.6	113.6	110.8	110.8	111.9	111.9	113.6	116.4	112.8
Other nonmetallic minerals.....	134.6	134.6	134.4	133.7	133.7	132.8	132.5	132.5	132.5	132.5	132.5	132.5	132.5	132.4	131.2
Tobacco products and bottled beverages <sup>5</sup> .....	131.7	131.7	131.7	131.7	131.7	131.7	131.7	131.7	131.7	131.8	131.9	132.2	132.2	131.4	128.2
Tobacco products <sup>6</sup> .....	130.8	130.8	130.8	130.8	130.8	130.8	130.7	130.7	130.7	130.7	130.7	130.7	130.6	130.5	129.6
Alcoholic beverages.....	120.6	120.6	120.6	120.6	120.6	120.5	120.7	120.7	120.7	120.9	121.0	121.8	121.7	121.3	120.5
Nonalcoholic beverages.....	171.1	171.1	171.1	171.1	171.1	171.1	171.1	171.1	171.1	171.1	171.1	171.1	171.1	167.4	149.3
Miscellaneous products.....	90.9	91.1	95.4	94.0	93.4	95.3	94.2	93.7	91.8	88.6	92.0	92.9	91.0	94.5	94.2
Toys, sporting goods, small arms, and ammunition.....	118.3	118.3	118.3	117.8	117.8	117.7	118.0	117.7	117.7	117.7	117.7	117.5	117.0	117.5	119.0
Manufactured animal feeds.....	67.6	68.0	75.6	73.2	72.2	75.6	74.0	73.7	70.8	64.5	70.6	72.2	69.0	75.1	74.4
Notions and accessories.....	96.4	96.4	97.2	97.5	97.5	97.5	97.5	97.5	97.5	96.3	96.3	97.5	97.5	97.5	97.5
Jewelry, watches, and photographic equipment.....	110.2	110.5	110.5	110.6	110.6	110.6	109.5	108.3	108.3	108.3	108.3	108.1	108.1	108.3	107.6
Other miscellaneous products.....	132.6	132.5	132.1	131.6	131.5	131.9	131.9	132.0	132.0	132.0	132.0	131.9	132.0	132.2	132.2

<sup>1</sup> As of January 1958, new weights reflecting 1954 values were introduced into the index. Technical details furnished upon request to the Bureau.

<sup>2</sup> Preliminary.

<sup>3</sup> Revised.

<sup>4</sup> January 1958=100.

<sup>5</sup> This index was formerly tobacco manufactures and bottled beverages.

<sup>6</sup> New series.

TABLE D-4. Indexes of wholesale prices,<sup>1</sup> by stage of processing and durability of product

[1947=100]

Commodity group	1950						1950						Annual average		
	June <sup>1</sup>	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1950	1950
All commodities.....	119.5	119.7	120.0	120.0	119.3	119.3	118.9	118.9	119.1	119.7	119.1	119.5	119.7	119.5	119.2
Stage of processing															
Crude materials for further processing.....	95.3	96.0	96.3	96.4	94.8	94.6	93.4	93.6	94.4	95.9	95.6	96.4	96.1	96.7	99.4
Crude foodstuffs and feedstuffs.....	86.8	87.5	88.0	88.0	84.7	83.7	82.1	81.8	83.2	85.3	85.2	86.3	86.7	86.8	92.8
Crude nonfood materials except fuel.....	108.2	108.9	108.8	108.8	110.5	111.7	111.4	112.8	112.3	112.7	112.1	112.6	113.1	112.2	108.4
Crude nonfood materials, except fuel, for manufacturing.....	106.3	107.1	107.0	106.9	108.8	110.1	109.9	111.4	110.9	111.3	110.6	111.2	111.8	110.8	106.8
Crude nonfood materials, except fuel, for construction.....	142.1	142.1	142.1	142.1	142.0	142.0	140.4	140.4	140.4	140.4	140.4	140.4	140.1	140.3	138.0
Crude fuel.....	121.3	120.7	122.0	123.7	125.5	126.0	125.7	125.2	124.2	124.2	122.5	119.7	120.3	123.4	121.2
Crude fuel for manufacturing.....	120.9	120.3	121.5	123.2	124.9	125.5	125.2	124.7	123.7	123.7	122.1	119.3	119.9	122.9	120.9
Crude fuel for nonmanufacturing.....	122.0	121.4	122.8	126.5	126.3	126.9	126.6	126.0	124.9	124.9	123.2	120.3	120.9	124.1	121.8
Intermediate materials, supplies, and components.....	127.1	127.1	127.6	127.5	127.4	127.5	127.3	127.3	127.1	126.9	127.0	127.2	127.1	127.0	128.3
Intermediate materials and components for manufacturing.....	129.1	129.2	129.5	129.4	129.5	129.5	129.4	129.5	129.4	129.4	129.1	129.4	129.5	129.5	127.2
Intermediate materials for food manufacturing.....	99.0	98.6	98.3	97.9	97.2	97.4	97.0	97.8	98.5	99.1	98.6	99.3	99.5	98.5	102.2
Intermediate materials for nondurable manufacturing.....	105.8	106.8	106.9	106.8	106.9	106.9	107.0	106.8	106.9	107.2	107.0	107.0	106.8	106.4	104.7
Intermediate materials for durable manufacturing.....	158.5	158.8	159.0	158.9	159.0	159.0	158.6	159.0	158.5	158.2	157.6	157.8	158.5	157.9	154.3
Components for manufacturing.....	150.5	150.8	152.0	152.0	152.4	152.1	152.5	152.4	151.6	151.3	151.1	151.9	152.0	151.5	149.5
Materials and components for construction.....	135.9	136.4	136.7	136.9	137.1	137.2	136.9	136.7	136.9	137.0	137.1	137.0	137.4	136.5	132.9
Processed fuels and lubricants.....	108.3	108.3	107.3	106.8	106.1	105.4	105.3	105.0	105.3	106.0	106.3	105.1	105.2	106.0	106.5
Processed fuels and lubricants for manufacturing.....	108.3	108.7	107.4	106.9	106.4	105.9	105.6	105.0	105.1	105.6	105.7	104.6	104.8	105.6	105.8
Processed fuels and lubricants for nonmanufacturing.....	108.4	105.6	107.4	106.6	105.5	104.7	104.7	105.1	105.6	106.7	107.4	105.9	106.0	106.8	107.7
Containers, nonreturnable.....	139.0	139.1	138.2	138.4	138.3	137.9	136.3	136.2	136.2	136.1	136.2	136.5	136.6	136.7	137.4
Supplies.....	115.4	115.4	117.3	116.6	116.3	117.1	117.2	117.1	115.9	114.1	115.7	116.4	114.6	116.6	115.1
Supplies for manufacturing.....	149.7	149.5	148.8	148.8	148.4	148.3	145.5	145.7	145.8	145.8	145.0	144.8	142.5	143.5	139.9
Supplies for nonmanufacturing.....	100.3	100.4	103.2	102.3	101.9	103.0	104.1	103.9	102.4	100.0	102.4	103.4	101.8	104.1	103.4
Manufactured animal feeds.....	61.6	62.0	60.8	67.5	66.7	70.2	75.1	74.4	70.6	64.0	70.5	71.5	68.1	74.7	73.0
Other supplies.....	123.0	122.9	122.8	122.7	122.6	122.3	121.2	121.2	121.1	121.1	121.1	122.1	121.6	121.3	121.2
Finished goods (goods to users, including raw foods and fuels)															
Consumer finished goods.....	112.1	121.2	121.4	121.4	120.5	120.6	120.1	120.0	120.5	121.4	120.2	120.5	120.5	120.6	120.8
Consumer finished goods.....	113.1	113.2	113.4	113.4	112.3	112.4	111.9	111.7	112.3	112.4	111.8	112.4	112.4	112.5	113.5
Consumer foods.....	106.9	107.5	107.5	107.4	104.7	104.8	103.6	103.5	105.0	107.2	103.6	105.4	105.6	105.5	110.5
Consumer crude foods.....	93.4	98.3	100.2	96.7	89.8	91.5	94.2	92.3	93.6	98.9	88.1	89.6	86.6	91.1	90.9
Consumer processed foods.....	109.8	109.5	109.1	109.7	107.8	107.7	105.6	105.9	107.5	109.0	106.9	108.8	109.6	108.4	112.6
Consumer other nondurable goods.....	113.6	113.2	113.7	113.8	113.8	113.9	113.8	113.6	113.5	113.8	113.4	113.1	112.8	113.4	111.7
Consumer durable goods.....	126.2	126.3	126.5	126.5	126.4	126.4	126.2	126.1	126.2	126.6	126.7	126.7	126.7	126.5	125.0
Producer finished goods.....	153.5	153.6	153.9	153.9	153.8	153.8	153.5	153.6	153.6	153.8	153.8	153.8	153.8	153.2	150.3
Producer finished goods for manufacturing.....	159.8	159.6	160.1	160.1	159.8	159.6	158.0	158.6	158.5	158.7	158.4	158.2	158.1	158.1	155.0
Producer finished goods for nonmanufacturing.....	148.5	148.5	148.6	148.5	148.7	148.8	149.0	149.3	149.4	149.8	149.7	149.6	149.6	149.1	146.4
Durability of product															
Total durable goods.....	145.9	146.1	146.5	146.5	146.8	146.8	146.6	146.7	146.4	146.4	146.2	146.1	146.1	145.9	142.8
Total nondurable goods.....	105.1	105.2	105.6	105.6	104.3	104.3	103.8	103.7	104.2	105.0	104.4	105.0	105.2	105.0	106.4
Total manufactures.....	125.8	125.7	126.0	126.0	125.7	125.7	125.3	125.3	125.4	125.7	125.5	125.8	125.8	125.5	124.5
Durable manufactures.....	147.3	147.4	147.8	147.8	147.9	147.8	147.6	147.6	147.4	147.5	147.3	147.3	147.3	147.0	144.0
Nondurable manufactures.....	108.8	108.5	108.8	108.7	108.1	108.2	107.6	107.6	108.0	108.4	108.0	108.6	108.7	108.5	109.2
Total raw or slightly processed goods.....	98.3	99.3	99.9	99.7	97.8	97.8	97.2	97.1	97.8	99.3	97.7	98.3	99.0	98.9	101.6
Durable raw or slightly processed goods.....	105.8	107.1	108.2	108.2	114.9	117.5	116.6	120.5	117.4	115.6	113.0	111.6	110.9	114.1	108.3
Nondurable raw or slightly processed goods.....	97.9	98.9	99.4	99.2	96.8	96.7	96.1	95.8	96.7	98.4	96.8	97.5	98.4	98.1	101.2

<sup>1</sup> See footnote 1, table D-3.<sup>2</sup> Preliminary.<sup>3</sup> Revised.

NOTE: For description of the series by stage of processing, see New BLS Economic Sector Indexes of Wholesale Prices (in Monthly Labor Review, December 1955, pp. 1448-1453); and by durability of product and data beginning with 1947, see Wholesale Prices and Price Indexes, 1937 BLS Bull. 1235 (1958).

## E.—Work Stoppages

TABLE E-1. Work stoppages resulting from labor-management disputes <sup>1</sup>

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935-39 (average).....	2,862	-----	1,130,000	-----	16,900,000	0.27
1947-49 (average).....	3,573	-----	2,380,000	-----	36,700,000	.46
1945.....	4,750	-----	3,470,000	-----	38,000,000	.47
1946.....	4,985	-----	4,000,000	-----	116,000,000	1.43
1947.....	3,693	-----	2,170,000	-----	34,600,000	.41
1948.....	3,419	-----	1,990,000	-----	34,100,000	.37
1949.....	3,606	-----	3,030,000	-----	50,800,000	.50
1950.....	4,843	-----	2,410,000	-----	38,800,000	.44
1951.....	4,737	-----	2,220,000	-----	22,900,000	.23
1952.....	5,117	-----	3,540,000	-----	59,100,000	.57
1953.....	5,091	-----	2,400,000	-----	28,300,000	.26
1954.....	3,458	-----	1,830,000	-----	22,600,000	.21
1955.....	4,320	-----	2,650,000	-----	28,200,000	.26
1956.....	3,825	-----	1,900,000	-----	33,100,000	.29
1957.....	3,673	-----	1,390,000	-----	16,500,000	.14
1958.....	3,604	-----	2,090,000	-----	23,900,000	.22
1959.....	3,708	-----	1,880,000	-----	60,000,000	.61
1959: June.....	460	722	183,000	830,000	2,990,000	.29
July.....	420	681	668,000	787,000	9,230,000	.95
August.....	380	636	161,000	757,000	13,400,000	1.44
September.....	322	624	109,000	781,000	13,800,000	1.48
October.....	277	548	125,000	775,000	14,100,000	1.45
November.....	161	402	41,100	652,000	4,300,000	.48
December.....	112	285	23,100	101,000	1,430,000	.14
1960: January <sup>2</sup> .....	200	225	65,000	140,000	1,000,000	.11
February <sup>2</sup> .....	250	400	70,000	145,000	1,250,000	.14
March <sup>2</sup> .....	270	430	85,000	140,000	1,500,000	.15
April <sup>2</sup> .....	370	530	110,000	190,000	1,500,000	.16
May <sup>2</sup> .....	400	600	150,000	225,000	1,750,000	.19
June <sup>2</sup> .....	425	650	190,000	285,000	2,750,000	.28

<sup>1</sup> The data include all known work stoppages involving 5 or more workers and lasting a full day or shift or longer. Figures on workers involved and man-days idle cover all workers made idle for as long as 1 shift in establishments directly involved in a stoppage. They do not measure the indirect or

secondary effect on other establishments or industries whose employees are made idle as a result of material or service shortages.

<sup>2</sup> Preliminary.



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